

No. 3108

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IN THE

# United States Circuit Court of Appeals

NINTH JUDICIAL CIRCUIT

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GEORGE J. HENRY, JR.,

Appellant,

vs.

CITY OF LOS ANGELES,

Appellee.

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Appellant's Opening Brief

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RAYMOND IVES BLAKESLEE,

Counsel for Appellant.

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APPELLANT'S OPENING BRIEF.

This case comes before your Honors on appeal taken by the complainant, George J. Henry, Jr., from a final decree entered in the lower Court in favor of defendant, City of Los Angeles, dismissing the bill of complaint and awarding costs to defendant. The action was commenced in 1913. The opinion of the lower Court (Transcript, page 61) finds the claims of the Lyndon patent in suit not infringed. The Court does not indicate that any one of the claims is invalid or void, and it is fair to be presumed therefrom that the claims come before your Honors as unanticipated and valid.

The patent in suit was issued to one Lamar Lyn-

don, March 11, 1902, No. 695,220, and relates to governors for electro-mechanical water wheels. The appellant is the assignee of all of the right, title and interest in, to and under the said Letters Patent, to all claims of infringement and rights to recover thereon. The appellee is using, and for some ten years has been using the water wheel governing apparatus set forth in the bill of complaint, both in the construction of the Los Angeles aqueduct, and in the production of electrical energy for distribution to consumers.

The Pelton Water Wheel Company which intervened in this suit and was made a defendant therein, subsequently took a license under the patent in suit and upon stipulation was thereupon excluded from the suit as defendant and intervenor. This company is probably the largest manufacturer of electro-mechanical water wheels in the United States, if not in the world, and a suit brought by appellant against it for infringement of the said Letters Patent was likewise dismissed upon stipulation, after said Pelton Water Wheel Company had acquired the said license for a valuable consideration.

The invention covered by the patent in suit, has been epochal in its effect upon industrial and domestic lighting, heating and cooking, and more particularly so upon the Pacific Coast of the United States, where electro-mechanical energy is generated from the streams having their sources high in the Sierras. Prior to the advent of the said Lyndon invention covered by the patent in suit, there prevailed in this electro-mechanical water wheel art an abso-

lute want of sensitive and accurate speed governing, that is, governing of the generating apparatus, driven by water power, and the result was that fluctuations, often to wide extremes, occurred in the supply of electrical energy produced by any such electro-mechanical generating unit. It will be readily understood that if a greater "load" is put upon a water-driven electrical generator, its speed of rotation will be reduced, thus diminishing the electric voltage output of the unit. The converse takes place upon decrease of load. Thus, in a given electrical system, such as that supplying the many domestic, industrial and transportation needs of a municipality, the shutting down of a factory here, the starting of a trolley car there, the switching on of the lights in a hotel or upon the streets; each would vary the demand upon the generating unit at the distant power plant and affect its speed unless adequately governed.

Before the advent of the Lyndon invention your Honors will doubtless remember that the variations of voltage or potential in the electric lighting circuits often caused disagreeable and trying fluctuations in the electric lights in office and household service. Far more important was the effect upon industrial machinery, which is universally required to operate at a fixed rate of motion.

In mountainous districts, where streams of water are found having a considerable grade or "fall," the water may be taken from the bed of a stream, conveyed in a ditch or flume or pipe along the hillside, and then conveyed over a steep hill in a pipe

line, which carries the water down to the power house. To the end of the pipe is fitted suitable nozzle apparatus for projecting and as may be required, varying, the flowing water under pressure against the blades, cups or buckets of the water wheel. This is the more general manner of developing water power in the mountainous regions of our Western States.

In the Eastern States where Lyndon resided, where the slopes are very gentle, and the water volumes proportionately larger, the fall or head that may be obtained economically in any installation is very much less, and the water is then conveyed in a much larger ditch or flume, and dropped to the water wheel, sometimes in a wooden or concrete or sheet steel chute or penstock, and sometimes taken directly from the bottom of a dam under less pressure or head, but usually utilizing a much larger volume of water, which is then supplied through a series of nozzles around the periphery of the water wheel.

In using mechanical power developed from the water wheel, whether it be the high pressure class known in the art generally as a tangential wheel, or the low pressure class, known generally in the art as a turbine wheel, it is obvious that there will be variations in the mechanical power utilized from the wheel shaft. For example, if the water wheel be used to drive a saw, when the saw is not actually cutting through a log, there will not be as much power required to drive the saw as when it is in a deep cut. The result will be that as the power or



work required from the wheel is lessened, the wheel will increase its rotative speed, and that also of the driven apparatus; unless there is co-incident with the reduction in the power demanded of the wheel, a corresponding reduction in the power of the water supplied to the wheel.

Therefore, if we desire *to retain the speed constant*, we must maintain a balance or equilibrium between the power of the water projected upon the buckets or blades of the water wheel and mechanical power being taken from the water wheel, that is, if we reduce the power demand, we must reduce the water power supplied to the wheel proportionately. If we increase the power demand we must increase the water power supply to the water wheel.

It is old in the art to provide the water wheel nozzle with a gate or gates by which the water supply to the wheel may be reduced or increased.

It is old in the art to provide automatic means for moving these gates. This is clearly stated at the beginning of Lyndon's specifications in the patent in suit (Comp. Ex. A., p.1, l.8) in which he says that—"the governors at present employed to regulate the water supply to the water wheel *in general*, simply operate to open or close the water gate, thereby allowing of the admission of a greater or less supply of water."

The manner in which this was originally accomplished in the art was by driving from the water wheel shaft a device sensitive to speed, for example, similar to the fly-ball governor on steam engines, too well known to require detail description. Upon an

increase of speed the fly-balls would travel outward describing in their revolution a greater circle. Upon a decrease of speed they would move inward, describing a concentric but smaller circle. The inward and outward movement of the fly-balls may be used to shift a valve, or other means setting into operation devices which would move to open or close the water wheel gate. But in controlling steam the inertia effects of water are not met with.

No material difficulty was found in the development of a governor to accomplish this purpose. It is obvious that, when the governor moved to close the gate, a less water quantity was flowing into the water wheel; that the water cut off by the gate would be reserved in the pipe, or dam, or in the reservoir which fed the pipe, and would thus be available for later use by the water wheel.

Water economy considered alone was therefore attained by this form of water wheel control.

It is further obvious that in order to prevent the speed of the water wheel from exceeding the normal speed, when the mechanical power required was reduced, as for example, when the log is cut through by the saw and the water wheel runs free, that the water wheel gate or gates must be, instantly, with said reduction in power, shifted to a position corresponding with a proportionately less use of water. The saw runs out of the cut in probably one-half second of time, it is therefore necessary that the gates be shifted from nearly wide open position to nearly closed position in one-half second of time. To move a gate of any considerable size, in one-half



second of time with the water pressure behind it, requires an enormous effort.

In large installations today, very many thousand foot pounds of work are required to move the large gates.

Water wheel governors are therefore built of very heavy and substantial parts, and must be extremely sensitive to speed variations so as to set into operation instantly the heavy machinery necessary to shift the water wheel gates.

When the water wheel gate is shifted quickly, cutting off or reducing the flow of the water through the water wheel gates, the water back of the gate in the pipe or penstock crowds forward, due to its inertia and in its efforts to continue its flow through the closing gate the pressure and velocity with which it is ejected through the nozzles is momentarily increased, and if the gate closing movement has been quick, this increase in pressure becomes very great, causing in practice, in improperly designed, adjusted, or operated apparatus, a break in the pipe line and *very great damage*. This effect is called *water ram*, its cause being the sudden checking of the water.

It is, therefore, extremely necessary that the security of the pipe line be guarded in every way against this inertia effect of water ram.

“Inertia in the art is that property of matter by virtue of which it retains its state of rest or of uniform rectilineal motion so long as no foreign cause changes that state.” (Century Dictionary.)

The inertia effect which is apparent upon the

closure of the water wheel gates and manifests itself as increased pressure, or what is commonly known as water ram or water hammer, is familiar to all of us in the "knocking" in the pipes when we close a faucet or other water gate.

The movement of the gates must be at the same rate and to the same degree as the power demanded from the wheel; that is, if we feed a log up to the saw, at the instant the saw enters the cut, we must commence to turn on water, and we must have the full water quantity flowing by the time the saw has fully entered the cut, otherwise, the speed of the wheel and saw will be reduced.

It is therefore necessary to open the gates with extreme rapidity—in this example—practically within one-half second of time.

If the pipe line be extremely steep, the water in the pipe will quickly respond on the opening of the gate and supply the requisite additional power to the wheel, because gravity will more quickly increase the velocity in a steep pipe than in one laid on a gentle slope, just as a train of cars will increase its speed more quickly on a down grade than on a level.

It is also clear that if we are to move the gates of the water wheel in a closing direction quickly to reduce the quantity of water flowing to the wheel, we are restrained from closing the gate at a rate that will cause a dangerous pressure rise or water hammer in the pipe line, and if we are to open the gates of the water wheel or turbine quickly, we are restrained from doing so at any faster rate than the water in the pipe will accelerate or increase its

velocity due to the action of gravity. These restraints are put upon us by the *inertia* of the water. They have been well known in the art from the earliest time.

The Century Dictionary definition of "inertia," given above, may be considered to be one of the fundamental laws of nature.

Mr. Lyndon did not discover this law, neither did any of the inventors referred to in this case, it is and was public knowledge.

The economy of water effected by holding back in the pipe line or reservoir that water which was not required for power when closing the water wheel gate was not discovered by Mr. Lyndon or any of the inventors or references in this case, but this was and is public knowledge.

*Mr. Lyndon was the first, however, to successfully govern by correcting for the effect of the inertia of the moving column of water in the pipe line.*

*Italicis generally are ours.*

#### LYNDON'S INVENTION.

Before Lyndon's teaching, governors were not allowed to move the gates quickly (or the pipe would burst and the plant be wrecked). Lyndon's introduction of an inversely operated bypass actuated by the governing means made possible for the first time—the *rapid* movement of the water gate to the required new position—thus catching the speed before it had changed.

The "time element of the main gate and water wheel" was before, the controlling factor. This Lyn-

don removed from the water gates and wheel and took care of it in the by-pass (Comp. Ex. A., Lyndon patent, page 4, line 96). He provided the way to operate the water gates with any desired degree of rapidity without over-running, and this without interference by the inertia of the water, which was taken care of in the by-pass as actuated by the governor.

We contend that Lamar Lyndon, took the inventive steps which made electro-mechanical speed control the success that it is today and complied fully with the law to secure patent protection afforded by the statutes.

*Lamar Lyndon was the first to conceive and disclose to others and apply for a patent thereon; of a combination of elements for accomplishing the automatic regulation of the speed of water wheels and turbines under the varying conditions met with in modern practice, so as to secure the regulation of the speed within sufficiently accurate limits to meet the requirements of modern electro-mechanical transmission service.*

Lyndon was in these respects a pioneer. Successful governing under the requirements of modern service was not accomplished before.

He pointed the way to securing in a water wheel governor—"the automatic return of the controller to normal position to interrupt the governing action before it had over-run," that is, the introduction of means such that the governor when in the act of moving the water gate to a new position would be prevented from moving the gate a little too far, and

then later moving it back a little further than necessary; this previously existing defect resulted in the governor making a number of successive movements, usually of reducing amplitude, but causing the speed to vary first one side and then the other of normal before the accurate speed was finally found and held. *The Lyndon device eliminated these oscillations.*

This "hunting" of the governor for its correct speed called by Lyndon *over-running* of the governor (and of the water wheel speed) was a very disturbing element in the speed control of the earlier wheel and resulted in an erratic, unreliable and damaging speed variation to the driven machinery, and in the case of electro-mechanical water wheel governing resulted in the voltage, or potential on the electric transmission lines raising and lowering a number of times, and consequently an intermittent intensity of brightening and dimming or darkening of the electric lights served therefrom. This was a common defect in 1900 until the use of Lyndon's invention.

At times, this over-running of the governor would cause serious speed fluctuations resulting in the wrecking or burning out of the driven machinery, and unless safety means were used on the pipe line, would also result in damaging stresses in the pipe due to the over-running or oscillatory movement of the water wheel gates affecting the water flow.

*The by-pass combination, is broadly and basic-*



*ally claimed in Claims 6, 7 and 8 of the patent in suit.*

*The combination preventing over-running is broadly claimed in Claims 3 and 4 of the patent in suit.*

The infringing structures clearly contain and utilize "the substance of the invention," within the meaning of the leading and controlling cases, such as the decision of this Court in *Stebler vs. Riverside Heights, et al.*, 205 Fed. 735. It is true that the invention has been clothed in different raiment by the defendant, but that will not escape infringement where the substance of the invention is taken. All that is required under section 4888 U. S. R. S., is that the inventor disclose and picture and describe the best form of the invention known or occurring to him at the time he makes application for patent, but his claims cover the full length and breadth of his addition to the art and another will not be allowed to take the invention of the combination claims, the very entities which are novel, and dress them up in different form and thereby escape infringement.

*The United States Patent Office has placed its seal of approval on Lyndon's claims in the broadest possible language (3, 4, 6, 7 and 8) in the patent in suit and awarded exclusive rights thereunder.*

These claims were allowed substantially as presented by the applicant, as will be evident from examination of the file wrapper and contents (Comp. Ex. Lyndon file wrapper and contents). This intention of the inventor and the coincident



intention of the Patent Office resulting in the issue of this broad patent is highly significant, and such joint intentions have of course been generally approved and adopted by the Courts, as see

Crawford v. Heysinger, 123 U. S. 602, 1887;  
 Trader v. Messmore, 1 Bann. & Ard. 639,  
 1875;

Bate Refrigerating Co. v. Eastman, 24 F. R.  
 649, 1885;

Williams Rubber Shoe Co., 49 F. R. 251,  
 1892.

As the Courts have said, it is proper to look through the disguises of an alleged infringement, and if there is thus disclosed a structure which coincides with the invention, in all reasonable respects, infringement must be found, *unless the inventor has disclaimed any breadth of invention*. The Courts have said upon this heading:

“Unless there are limitations written into the claim or *imposed by the prior art, or by the acceptance of a narrow claim in place of a broad one, in the Patent Office, in order to secure the patent* the inventor is entitled to every form in which his invention may be copied and to a broad construction.”

Hall Mammoth Incubator Co. v. Teabout,  
 205 Fed. 906.

Also,

“The court will look through the disguises, however ingenious, to see whether the inven-

tive idea of the original inventor has been appropriated, and whether the defendant's device contains the material features of the patent in suit, and will declare infringement even when those features have been supplemented and modified to such an extent that the defendant may be entitled to a patent for the improvement."

Crown Cork and Seal Co. v. Aluminum Stopper Co., 108 Fed. 866.

The very doctrine of equivalents, which as we shall see is unnecessary to apply rigidly in broad combination patents further than as to general principle, speaks for infringement in this case, as it always does where the real invention has been copied. See Walker on Patents, section 350, page 308, 4th Edition, as follows:

"The doctrine of equivalents *may be invoked by any patentee*, whether he claimed equivalents in his claim, or described any in his specification, or omitted to do either or both of those things. The patentee, having described his invention and shown its principles, and claimed it in that form which most perfectly embodies it, is, in contemplation of law, deemed to claim every form in which his invention may be copied, unless he manifests an intention to disclaim some of those forms." (Citing many cases.)

In the case at bar, the whole purport of the patent disclosure and claims, is, we shall see, along the lines of breadth, scope and comprehensiveness such as properly attaches to an invention which precedes all the rest, and the invention which underlies all

that later workers in the art produce, subjects them to tribute within the doctrine of *Railway Co. v. Sayles*, 97 U. S. 554.

*The defendant's structures fall within the clear language of the broad claims of the patent in suit, and even the terminology of the narrower claims finds its equivalent expression in defendant's structures.*

We need not cite any law to your Honors to the effect that when there are distinctions as to scope between claims, such distinctions must be presumed to have been intentionally created and embodied in the patent. If this were not so the claims, each of which in its effect, as the Courts have said, is a separate patent, would amount to mere useless repetition, and all but one would be void.

*The defendant has utilized the Lyndon means for preventing the over-running of the governor, accomplishing just the proper governor movement, and no more or less (as expressed in Claims 3 and 4 of the patent in suit.) The defendant has clearly utilized the by-pass in combination as taught by Lyndon.* That the defendant's structures utilize these broadly claimed combinations and entities to produce *the same useful results, is beyond dispute, and was so found by the lower court* (Trans. p. 68, lines 4 to 8). That the results are produced in substantially the same manner cannot be gainsaid. And that the means are substantially equivalent, within the proper broad interpretation of the claims, certainly must be conceded. A pioneer invention is entitled to a greater measure of reward in terms of mo-

nopoly, than a mere producer of detail variation. Our contention is supported by the decisions of the Supreme Court in *Winans v. Densmead*, 15 Howard, 341, and *Morley Machine Co. v. Lancaster*, 129 U. S. 273.

Either infringement must be found in this case or mere mechanical change, with or without invention, will escape a charge of infringement of a prior patent. This Court has often held to the contrary, and it is safe to say has never had before it for adjudication a patent with claims in broader terms or for an invention of more basic and epoch-making character.

The art has not ignored the patentee. Until Lyndon gave the invention to the world there was no adequate governor for electro-mechanical water wheels. Lyndon diligently notified infringers from the first and he had not the means to prosecute infringers and never was in a position so to do. The complainant in this case and assignee of Lyndon has taken up the work, and either the monopoly should be respected, or a tragic day has arrived for patentees who put their faith in governmental contracts.

The trial Court fell into the misapprehension of the law that the patent must be narrowly construed when the specific structure disclosed in its drawings and specifications had not been utilized. It is true that if the specific disclosure of a narrow patent and *which claims substantially the very thing shown in the drawings, and no more*, does not take the field, but something radically at variance therewith does,

the patent will not ordinarily be as broadly construed, in weighing infringement, as if the opposite state of facts existed. *But in the case at bar, to emasculate the patent by any such process of false reasoning and false application of patent law, is to nullify the whole grant, because Lyndon made and claimed a broad and important invention.*

In this connection see the principle announced by this Honorable Court in *Kings County Raisin & Fruit Co. et al. v. United States Consolidated Seeded Raisin Co.*, 182 Fed. 59, to the effect that anticipation does not attach to a mere *abandoned experiment*, or prior theoretical machine; also the principle announced in the *Paper Bag* case, 210 U. S. 405, to the effect that the law does not require of a patentee that he ever practice the invention himself, or that the exact thing of the patent disclosure be put into practice, in order that the patent may be found infringed by another who uses a different thing within the spirit of the invention.

We repeat, that Lyndon complied with section 4888 U. S. R. S., to the effect that "in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement or combination which he claims is his invention or discovery."

Referring to the said statute, Walker says (section 174):

"The description is required to explain the principle thereof, and the mode of applying



that principle that the inventor believes to be the best. It is not necessary that the description should be intelligible to every intelligible man, nor to every skilled mechanic. If it can be understood by those who possess full knowledge of the prior inventions in the same department of art or science, it is full, clear, concise and exact enough to comply with the statute."

(See *Loomis v. Higgins*, 105 U. S. 580.)

Also the rules of the Patent Office confine the applicant to but one specific disclosure.

It is always the complaint of the infringer that he has made a change from what the patentee has shown in his patent. *It is easy to multiply the species when the genus has been roughed out.* But the real inventor, and the man who must be respected and paid for his inventive act, is the man who blazes the trail by which the later practitioner in the art must travel to get the results. *Appellant contends that no one has obtained the results produced by the Lyndon invention without using that invention, as claimed.* And while we well know that a patentee does not claim "results" but means for producing results, we point to the claims of the patent in suit, and to the nature and merits of the invention, and pray that Lyndon's assignee, the appellant, be upheld as the owner of a legal and valid monopoly for the *entity* which the defendant has employed.

This entity, in combination claims, is to be considered as a single thing, distinct and separate from the parts of the claim, as has been pointed out in *Yesbera v. Hardesty*, 166 Fed. 120, 125, as follows:



“In a combination patent there are no unpatented features in the sense that they are separable from the patented ones, and no one of the elements is patented. They may all be old and not patentable at all unless there is some new combination of them. The point to be emphasized is that the law looks not at the elements or factors of an invented combination as a subject for a patent, *but only to the combination itself as a unit distinct from its parts*, and in such case there could be no comparison of patented and unpatented parts.”

## SPECIFICATION OF ERRORS AND ARGUMENT.

When we turn to the conclusions of the Court, (T. p. 62) we are immediately confronted with the clearly apparent fact that the Court, in the first place, paid too much attention to immaterial details of the specific construction disclosed in the Lyndon patent, and in the second place, erroneously applied the tests of infringement by a too curtailed application of the elastic doctrine of equivalents.

We contend that the Court was clearly in error in his understanding of the Paper Bag case, 210 U. S. 405 (*supra*), and the other cases mentioned in the conclusions (T. p. 63). Clearly, in claims such as 3, 4, 6 and 7 of the patent in suit the word “means” or the like, is employed to describe connective features of the combination and such terms may be considered to cover practically any substitute part or feature. This appears particularly from the language in *Davis Sewing Machine Co. v.*

New Departure Manufacturing Co., 217 Fed. 775, and quoted below.

In *Ries v. Barth*, referred to in the conclusions of the Court, we have almost an analogous situation, and the Court there states that the patentee in reciting "means" or the like, in his claim, calls for any means, and covers any means, for the purpose in view. Your Honors' attention is particularly invited to these four cases referred to in the conclusions of the Court and presented by appellant in the lower Court (T. p. 63). The Court admits that claims using such terms as "means" are valid where the specifications clearly disclose the particular means or mechanism having the function indicated in the claims. The trial Court apparently considered that this language implied that the claims must be limited to such *particular* means or mechanism. *What the Supreme Court meant was that claims for means are valid where they are supported by the presence in the specifications of means having the function indicated by the claims.* The Supreme Court said that "means" and "mechanism" were clearly used by the inventor to express the *relation* between the correlated parts, the plate and the cylinder in that case, and which was found to be the gist of the invention, such plate and cylinder in themselves being old. We contend in this case that the *relation* between the by-pass valve and the water gate was new with Lyndon, as also the *relations* between the features preventing over-running of the governor, and that the defendant-

appellant is using such *relation* and infringes the claims.

IN CONSIDERING A COMBINATION CLAIM WE HAVE BEFORE US AN ENTITY THE COMPONENT PARTS OF WHICH MAY INCLUDE "MEANS" FOR COMPLETING THE WORKING RELATIONS BETWEEN THE OTHER PARTS. THESE MEANS WHICH WE MAY CALL CONNECTIVE IN NATURE, MAY BE REPRESENTED IN THE INFRINGING STRUCTURE BY ANY SUBSTITUTE WHICH CAN PERFORM THE SAME OFFICE OR DUTY. SO IN SEARCHING FOR INFRINGEMENT OF A COMBINATION CLAIM WE MUST SEARCH FOR THE ENTITY, FOR THAT IS WHAT THE CLAIM COVERS. ONE CANNOT AVOID INFRINGEMENT BY USING THE COMBINATION *ENTITY* AND IN SO DOING PROVIDING ANY MERE SUBSTITUTE CONNECTIVE MEANS. THE TEST IS, HAS THE SUBSTANCE OF THE INVENTION BEEN APPROPRIATED BY THE DEFENDANT.

Each combination claim of a patent is a separate entity, and each of the claims of the Lyndon patent in suit is for a combination. There is a striking analogy between such entity and the entity of a corporation. A corporation is no less a unit or single entity because it includes a plurality of stockholders. These stockholders may in fact be other corporate entities as well as natural individuals.

The claims are the measure of the invention as within the Paper Bag case decision, and are different measures of the invention in accordance with their several scopes.

The substance of the claim is the combination. That is the entity to be considered in inquiring as to infringement. In other words, the combination is a unit and such unit is the thing to be found in the infringing structure. It is not less a unit, because it has component parts, than is the human body with its co-ordinated organs and their functions and "inversely" operated legs actuated by the connective nervous system. *Where such component parts are recited as inter-related through the agency of means, the claim is to be construed as a unit and is not to be interpreted as being merely or in any particular sense or any such means alone.* It is not proper to magnify the importance of specific means to such an extent that the substance of the unitary combination is lost sight of. Within the meaning of the Paper Bag case, which is the last word of the Supreme Court on this subject, the "pith" of the invention is the *combination as a unit* stated in the claim and the "means" recited in the claim are employed in a connective sense or as, connecting together or, joining together in inter-relation the other parts. Such means may be the same means or any substitute means capable of performing the same service or duty in the combination. In other words, coming down to Claim 6 of the Lyndon patent, it was necessary to include in the claim means for inversely operating the water gate and

the by-pass valve to complete the inter-relation of parts of the structure, thus forming the unitary combination. Had the claim merely been as follows: "Inversely operating water gate and by-pass valve"; or, on the other hand, "Means for inversely operating a water gate and a by-pass valve" and for nothing more, the "means" would then have been the entire substance of the claim. As it is, the means of such claim is merely used in a connective sense to complete the inter-relation of the parts, thus making a proper unitary combination, and the employment of any substitute for Lyndon's specific means will not avoid infringement. The principal elements of the claim are, therefore, the water gate operating means and the by-pass valve, and the "means connected to the water gate operating means and operating the by-pass valve inversely to the operation of the water gate" are any connective means perfecting the inter-relation between the water gate operating means and the by-pass valve, and completing the combination.

Thus infringement can not be avoided by using a substitute for specifically shown connective means if the *entire combination* be employed in the infringing structure; the test is whether the combination as a unit is found in the infringing structure irrespective of the presence of mere substitute connective means. To allow an infringer to escape because he provided a mere substitute connective means violates the entire principle of construction of combination claims, particularly within the meaning of the Paper Bag case and the other cited cases



interpretive of that decision, and with the addition of the very recent case of Davis Sewing Machine Co. v. New Departure Manufacturing Co., 217 Fed. 775, second syl. and last paragraph of page 782, page 783, first and second paragraphs page 784, and second paragraph page 786. In this decision the following significant language is found (p. 782):

“In other words, where used with reference to the exact point of novelty, ‘means’ or ‘mechanism’ may expose the claim to attack on the ground that it is functional; in that respect, each case will present a problem by itself. But where used with reference to the make-up of the field in which the real invention finds its usefulness or with reference to the *connecting parts* which permit the salient novelty of the invention to accomplish its function, *these words are only* a convenient formula of the broadest equivalency of which the real invention permits. Their use amounts to a statement by the inventor, that, as to this element, the claim is not confined to the form shown, *nor to any close imitation of that form, but extends as broadly as is consistent with the extent of his inventive step to all forms accomplishing that part of the ultimate, composite result,*  
\* \* \*.”

The Paper Bag case is further digested in this decision, and on page 784, reference is made to the Patent Office practice pertinent to the use of the terms “means,” “mechanism,” and the like.

*Universally where the term “means” is used in the Lyndon claims, it is used in a connective sense to complete the inter-relation of working parts of the unitary combinations. No such language is used*



where the principal novel element of the combination is referred to, such as the "valve controlling said by-pass," or "a valve for such by-pass." This language applies to leading working parts of the novel unitary combinations. "Means" is used in a connective sense.

The term "equivalent" has no fixed meaning and the decisions above quoted make it clear that one cannot escape infringement by substituting different, or even patentably different, means for those specifically shown and described in the patent in suit, where the same results are obtained, or the same; or similar results are obtained in substantially the same manner. This is the doctrine of *Winans v. Denmead*, *Howe* (*supra*).

The trial Court falls into error by assuming that the patent is only for the specific thing shown in the drawings (T. p. 66). All of the authorities point out that claims may vary in scope. Certainly Claims 3, 4, 6, 7 and 8 of the patent in suit are not to be limited to the specific things shown in the specifications and mentioned in certain specific claims; even the specific claims were entitled to a broad range of equivalents warranted by the scant state of the prior art, which nowhere discloses any of the combinations covered by the patent in suit. The patent stands absolutely unanticipated: not even the attempted piece-meal anticipation condemned by the Court in *Yesbera v. Hardesty*, 166 Fed. 120, 125 (*supra*), is of avail to appellee in this case.

The Court states (T. p. 66), that we must consider the prior art in determining the proper posi-

tion to be occupied by the invention and the relation thereto of the alleged infringing device. How could the Court fail to find infringement, as far as anything in his conclusions or in the record appears, under such procedure?

The trial Court in his conclusions states (T. p. 67) that there has never been a machine manufactured like that described in the patent in suit. While it is true that not the exact form shown in the drawings has been put into practice, the invention has been widely copied, as shown by the evidence of many witnesses such as that of Prof. Cory, Dean of the College of Mechanics of the University of California (T. p. 262-498-531). Prof. Cory testified that the Lyndon invention has revolutionized the art of water wheel governing (T. p. 468-469), (Henry, T. p. 416-417). The appellee has used it, not only in this plant but in other much larger plants installed by the Pelton Water Wheel Company for the City of Los Angeles, and which company has, as we have seen, taken a license under the patent in suit and paid a large cash consideration to the appellant therefor. (Henry, T. p. 2480-2484-2486-2504.)

*The law is the only remedy* known to Comp. to establish validity and thereby establish a licensable patent. It introduces a hiatus into the affairs of patentees for the Court to rely on an absence of licenses to defeat validity—for the infringer constantly relies upon the absence of a decision of validity to refuse to pay for a license. This leaves

the patentee in midstream denied a landing on either shore.

We contend that utility of the invention is strongly established by the said licenses and by intervenor's sworn statement that it had furnished about \$194,000 worth of such apparatus. (T. p. 24-25.)

It is of no significance that this license was taken and other licenses issued only since the commencement of this suit. The fact that the Pelton Water Wheel Company intervened in this suit and was made a defendant and commenced a vigorous campaign of defense, (T. p. 21 to 50) and then took a license, acknowledged validity and withdrew as intervenor is highly significant. (T. p. 87.) There could be no better indication of what that large manufacturing concern thought of the patent in suit.

We have seen that in accordance with the Paper Bag case (*supra*) it is immaterial whether the specific device of the drawing of the patent in suit has been manufactured or not prior to the commencement of the suit.

The Court makes a most remarkable statement further down on page 67 of the transcript, namely, that unquestionably the evidence shows that the Lyndon invention will not work if the mercury cups were used as disclosed by the patent, without change.

We are unable to find the evidence to support any such conclusion and Lyndon showed more than one form and did not limit himself to mercury con-

tacts. This concerns a mere trivial detail. It was within the ordinary skill and knowledge of any electrical worker to vary the depth or substitute other form of contacts or by well known adjustments to vary the time of performance of the various parts of the structure.

See

Defendant's Expert Berry, T. p. 1007, 1008-1339;

Defendant's Expert Durand, T. p. 2865, R. D. Q. 209.

However, the machine of the patent is clearly operative.

Defendant's Expert Berry (T. p. 1323) says the *only reason* he would not guarantee operativeness is that it is not customary for engineers to make such a guarantee. (Also T. p. 1456; also T. p. 1320, Q. 898, Defendant's Expert Durand in answering XQ. 109, T. p. 2829, says:

“\* \* \* the latter (the device contemplated in the Lyndon specification) is operative \* \* \* (and said devices) are operated entirely independently of such human intervention.”

Comp's Expert Cory, T. p. 468, 469, 2385, finds in the Lyndon disclosure “a complete operating mechanism \* \* \*.”

Berry finds the electrical features simple, and he fully understood them (T. p. 901).

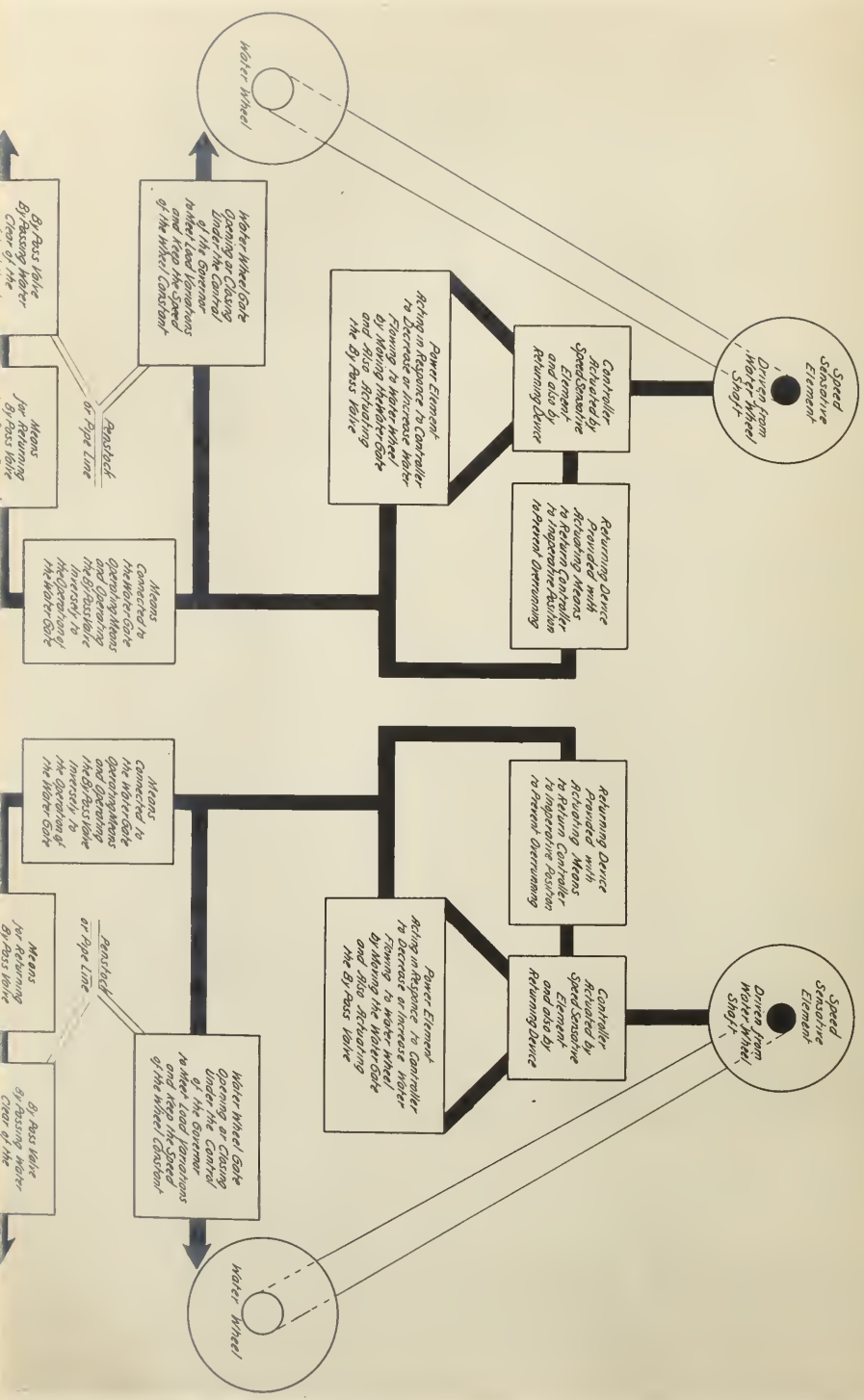
The conclusions of the Lower Court (T. p. 67—bottom) that difference in principle exists is utterly without foundation in view of the record.



# Principle of Operation

Lydon Invention

Infringing Structure





A graphic showing of the principles of operation is inserted opposite to aid to a clear mental picture, and the following testimony is cited:

Electrical and mechanical actions are equivalent and electrical devices effect mechanical action. (Comp. Expert Cory, T. p. 248, Ans. 48; also T. p. 497, 2335 to 2345.)

The gate and by-pass pass movements are by mechanical means in Lyndon (Defendant's Expert Berry, T. p. 899). Mechanical action of all parts in the Lyndon patent is shown by Berry, T. p. 1310, Ans. 867.

See also Lyndon (the patentee), T. p. 1871 and Meyer, T. p. 2662.

The Bakersfield device referred to in the conclusions of the lower Court was an abandoned experiment, as we shall see, and was thrown out and superseded by something else, and never operated in accordance with the principles of the patent in suit. It did not even contain, by the remotest stretch of the mechanical imagination, all of the elements of Claims 3, 4, 7 and 8 or any near approach thereto. And it did not contain operatively the elements of Claim 6. It is now controlled from a distant plant by the Lyndon invention.

The only witness produced who had ever operated or attempted to operate this plant in regular service was the superintendent, Dearth, in charge of same from a period of a year before the installation and until many years after. Dearth was produced by the complainant, and his testimony shows that the

attempted governor devices were inoperative. T. p. 1647-1650.

That they failed to meet the requirements. T. p. 1666-7110.

That they were experimental only. T. p. 1646-1659-1679-1706.

That the said governor devices were abandoned. T. p. 1645-1648-1677-1684.

That the parts were thrown into the scrap heap and sold for junk. T. p. 1648-1650, 1653, 1654.

That after said abandoned experiments the plant was operated by hand control at great expense and inferior service. T. p. 1661-2-3-4, 1681, 1667-1682-1697.

That within the last few years only it has been "tied in" with the other plants and the system governed by a master plant located far away and known as the Crane Valley Plant. T. p. 1683-1708.

Dearth's qualifications and his testimony stands uncontradicted and is supported by Beal (his superior). T. p. 1729 to 1735, 1737-1749; also by Sessions, now practicing law and at that time president of the company who built the apparatus. T. p. 1714-1715-1716-1719-1720; by Expert Cory, 2317; also by Henry, T. p. 1798-1800-1801-1807-2260.

That the electric transmission system into which this old Bakersfield plant feeds is governed by the distant Crane Valley plant employing governor apparatus now licensed to the Pelton Water Wheel Co. under the patent in suit, is shown by the testimony of Complainant's Witness Van Orden, T. p. 1752-1760; Halloran, T. p. 1790-1792; Henry, T. p.

1796-1797, and Comp. Ex. Pelton Co.'s License agreement.

It may be true that Cobb and Van Emon and Berry tried to build a water wheel governor—they fully realized the need—the demand was very great. (Def. Expert Cobb, T. p. 554-600-731-675; Comp.'s Expert Cory, T. p. 250, Ans. 55; also by Dearth, T. p. 1654-1681-1682-1689.)

It is shown, however, that to take care of the inertia effects the well known air chamber was used and therefore they missed entirely the conception of preventing the inertia effects as invented by Lyndon.

Defendant's Expert Cobb, T. p. 764-705-767, reported that the by-pass was a failure and should be replaced by operative mechanism. T. p. 2324; Def. Exhibit Cobb efficiency report, page 18; Cobb, T. p. 756. "Whatever I stated in that report was absolutely true at the time it was written."

We contend the attempted use of the by-pass at Bakersfield was for an entirely different purpose, namely, to pass water to the riparian owners on the Kern River below the plant, and that the builders had no conception of the Lyndon invention.

See Defendant's Expert Berry, T. p. 1021-1066-1397;

Complainant's Expert Cory, T. p. 263, Q. 113.

There was no speed sensitive element at Bakersfield, and this is an essential to the Lyndon invention. Comp. Expert Cory, T. p. 2382-2309-2313-2412-2419.

Berry is the last one who had possession of the

drawings of the device, but he did not produce them. (T. p. 1228, Sessions 1722) and does not vouch for the correctness of his reproduction from memory. Def. Ex. Berry blue print No. 1; Berry, T. p. 1329. The other Def. exhibits MZ, ZZ and XX are not relied on. T. p. 748.

The Bakersfield by-pass valve was generically defective for governing purposes, in that its operation involved heavy friction, as distinguished from the Lyndon and defendant's valves, which are of the frictionless generic type, operable sensitively by the governor elements. Lyndon taught the use of the frictionless type for by-pass control.

See Cobb, T. p. 761-790-883; Henry, T. p. 1811 to 1814, 2252; Cory, T. p. 2299, 2302, 2303, 2308, 467;

Dearth, T. p. 1670-1657; Lyndon, T. p. 2026-2113-1965-1966-1967;

Van Orden, T. p. 1766 to 1770; Wilson, T. p. 2274-2275; Meyer, T. p. 2669.

We have previously disposed of the lower Court's erroneous position and view with respect to the so-called doctrine of "paper patents," which does not apply to the valid patent sued under, but only to attempted anticipations of such valid patent.

We find a peculiar statement of the trial Court, commencing at the bottom of T. p. 69, and referring to the Lombard governor elements of the defendant's structure. We must take direct issue with the trial Court; in that the issue of this Lombard

patent amounts to any declaration by the Patent Office that there is any want of equivalence between the Lyndon invention and that of this Lombard patent. It is no evidence of non-equivalence but merely a declaration of patentable difference which exists, in that the Lombard later patent is a specific structure falling within the Lyndon broad claims. Had Lombard demanded broad claims (which he did not) he would have interfered with Lyndon and *not otherwise*. Lombard's application was long after Lyndon, and probably after Lyndon's disclosure to Lombard. This Court has often found that a later patent may infringe an earlier patent, as in *Bliss v. Spangler*, 217 Fed. , and in *Stebler v. Riverside Heights, et al.*, 205 Fed. 735 (*supra*). The fact that the Patent Office failed to declare an interference, as it should have, between claims of the patent in suit and said Lombard patent, does not signify anything, as clearly appears in the controversy in this court and in the Patent Office, as disclosed in 227 Fed. 607, *Wilson et al. v. Bole, et al.*

It was not necessary for Lyndon or his assign to notify the Lombard Company. However, Lyndon says he did this more than once. Lyndon, T. p. 1974, 1992, 1994, and the publication of the patent is notification to the public. Lyndon never knew of the infringement of his patent by the defendant in this case. T. p. 2005.

The record shows fully that this device has been part of water wheel governors as to which notification had been given. T. p. 293, 2135. We shall see later on that this Lombard speed returning element



of the infringing structures was clearly the invention of Lyndon and embodied in the disclosure and claims of the Lyndon patent.

The trial Court then proceeds to make the remarkable assertion that Claims 8 and 9 are the only claims of the patent in suit concerning the by-pass valve. T. p. 70. *How could the Court overlook the clear inclusion of this valve in Claims 6 and 7?* Certainly the trial Court has not fully weighed and considered these claims or such oversight could not occur. *We believe that therein lies possibly the most fundamental error in the attitude of the trial Court to this whole question of infringement, namely, that the Court has not considered and given the proper legal effect and weight to the broad claims of the patent in suit, but has merely compared the drawings of the patent in suit, with defendant's structures, and hesitated to find them strictly and technically and in all details and respects, mechanical equivalents.* In such attitude he ignored the substance and gist of the invention.

The testimony shows that the defendant clearly uses the same generic type of valve for its by-pass. Wilson, T. p. 1628-1629; Van Orden, 1766 to 1770; Cory, 2308; Lyndon, 1965 to 1967-2113.

This generic frictionless type of valve, as exemplified by the "butterfly" valve, is clearly disclosed in the patent in suit, and it may well be read into Claims 6, 7 and 8 if the Court so elects. As to this, see the opinion of the Court in the recent decision of Waterloo Cement Machinery Corp. v. Engel, 230 Fed. 169, at page 170, as follows:

(1) "According to the specification the supporting crossbar is provided with an upwardly projecting spindle so affixed as to make it a part of the crossbar. Neither of the claims in issue particularizes such feature, and the first question to be answered is whether the particular crossbar of the specification is included in the claims and protected by the patent. It is referred to in the specification with considerable detail, and stress is laid upon the manner of arranging the shaft in relation to the mixing tank and extending it into 'an integral upwardly extending sleeve 13 of the tank so as to provide an axle bearing for the tank, preventing the latter from swerving or tilting on its ball bearings.' The drawings quite clearly illustrate the details of construction of the crossbar, and, indeed, the feature of projecting the shaft into the tank was evidently regarded by the patentee as a highly important feature of the invention. To project the bearing into the tank, instead of projecting it outwardly from the bottom of the tank, as shown in prior patents in evidence, was conducive to a more even distribution of the load and a better balancing of it on the bearing shaft, and also to a more convenient use of the tank for mixing and discharging material. In my opinion the claims must be construed to cover the actual invention; that is, as if the claims had specified the crossbar or spindle as one projecting into the tank. Such a construction I believe is justified, even though the claims do not contain the words 'substantially as described.' *Mitchell v. Tilghman*, 19 Wall. 287, 22 L. Ed. 125."

The Court clearly misjudges the invention of Lyndon in his conclusions (T. p. 71). No governor was ever heard of that had as its object the speeding up or slowing down of a water wheel. The

object of the governor is to maintain constant the speed of the electro-mechanical water wheel. The object of the defendant's device is not to take the pressure off the wheel and make it tend to slow down, but equally with the Lyndon invention, *to keep the wheel moving at a constant speed and thereby keep the potential of electrical energy in the circuit of the generator constant*. It is immaterial if the defendant's device only uses the by-pass in a closing movement of the water wheel gate, or needle valve, *which we deny*. Lyndon discloses means for causing this movement in *either* closing or opening movement of the water wheel gate. The claims are clear as to this, and the whole purport of the Lyndon patent is to that effect.

*Defendant's witness* McAfee, who has operated the Division Creek plant for years and is familiar with the Cottonwood plant also, gave very definite testimony, T. p. 1545, Ans. 34; 1548, Ans. 47; 1549, Ans. 50; also 1555 to 1572, and which is very convincing on this.

The continued use by the defendant is shown by this same witness. T. p. 1581-1582-1583, and that its use was to prevent pressure variations and secure accurate governing. T. p. 1591, Ans. 292, 1552. On this question of governor movement see also, Cory, T. p. 429; Lyndon, 1858; Henry, 407. That both plants have the same devices, see Scattergood, 162.

A few of the questions and answers of Prof. Cory and Witness Scattergood and Defendant's Witness McAfee are quoted as follows:

*Prof. Cory testifies.* T. p. 279, referring to Comp. Ex. U and V.

“Q. 160. If the circulation of oil or other fluid in these dashpots is retarded, what will be the effect upon the responsiveness of the by-pass valve to the governing action?

“A. The tendency will be to make the governing of the by-pass valve more slow or tend to retard its operation, although not at all to prevent its ultimate operation to the limits desired. It introduces what is known as the time element or delay in time in the operation of the by-pass valve. If the flow of the oil or liquid in the dashpot is retarded by the adjustment of the screws, it would tend to increase the time element required for the operation of the by-pass valve or to make it operate more slowly.”

*Scattergood testifies.* T. p. 162, in regard to the defendant's apparatus:

“Q. 26. By Mr. Blakeslee: What is the result of this operation of the auxiliary needle in conjunction with the sudden closing of the main needle?

“A. The result is to prevent dangerous rise of pressure which might endanger the penstock line or, at least, that is the intended result.”

T. p. 166—

“Q. 32. If this auxiliary needle and nozzle were eliminated, would or would not there be a difference in velocity of water flow past the main needle upon moving the same toward closing position, resulting in a difference of velocity of the water wheel in rotation during governing action?

“A. There would be and there is at all times, as I have already stated. The effect of the auxiliary device occurs simply in rare instances in which the closure is unusually rapid, and to prevent that increase going beyond a certain point—that is, the increase of pressure in the pipe line—and to that extent it affects the possible increase which might otherwise appear in the velocity of the water corresponding to the additional increase of pressure which would under those circumstances occur.

“Q. 33. Then am I correct in deducing that the extent of service of the auxiliary needle and nozzle are dependent upon the extent of operation of the governing device, which is, in turn, controlled by the extent of fluctuation of load upon the water wheel?

“A. Altogether upon the rate of that fluctuation. At ordinary rates of fluctuation of load, the auxiliary nozzle has no effect whatever, and it is only in case of sudden decreases in load that its effect occurs, and the effect in preventing increases of pressure in the pipe line increases of velocity of the ejected water from the main nozzle is only partial.

“Q. 35. Do you remember when both of these plants with the governing devices were installed?

“A. I believe they were both installed in the year 1909, one in the early part of the year and one in the fall.”

T. p. 1544. McAfee testifying says:

“Q. 33. By Mr. Westall: State what, if any,



means are provided in the Division Creek No. 2 plant to guard against excessive pressures in the pipe-line.

“A. That is by the relief nozzle or auxiliary.

“Q. 34. Please state in a general way the construction and mode of operation of the auxiliary relief nozzle referred to in your last answer, and describe how it operates to protect the pipe-line from excessive pressure.

“A. The auxiliary or relief nozzle is supposed to be a relief, and which is a relief to the pipe-line in surging or sudden loads—overloads—of any kind that may come on and cause the big needle to open suddenly. The relief nozzle is supposed to take care of that in the opening or closing suddenly of the main needle.

“Q. 36. By Mr. Westall: State in a general way the movements of the main needle nozzle and the auxiliary relief nozzle during ordinary operating conditions of Division No. 2 plant.

“A. Under the ordinary conditions of operation now the auxiliary is always closed.

“Mr. Blakeslee: We object to the answer and ask that it be stricken out as not responsive to the question.

“A. The auxiliary is always closed, as I have said, unless there is a load comes on of some kind—a heavy load—of 80 or 100 kilowatts, the auxiliary doesn't move. The way the constant load is now the auxiliary is always closed, as I have stated.

“Q. 37. Have you at any time observed especially or kept any record of the number of

times during any fixed period that the auxiliary relief nozzle opened?

“Yes, sir.

“Q. 38. When did you make those observations and how long did you continue to note those matters especially?

“A. I have been watching it for movements since about the 15th of this month, and the auxiliary relief never opened till I forced a heavy surge on the pipe-line to make it open to see if it was working properly.

“Q. 39. Please state if you know approximately how often during the same period of time the main needle moved toward either open or closed position?

“A. It is continuous at the time I am running. It is always opening and closing to adjust the speed.

“Q. 40. How is the period during which you have given especial attention to the movements of this auxiliary relief nozzle compared as to normal operation of the plant with other periods during which you gave no especial attention to the movements of that auxiliary relief nozzle?

“Mr. Blakeslee: Objected to as indefinite, no object of comparison or basis of comparison being given.

“A. Well, during the time that we had the dipper dredge working it caused a heavy fluctuation in the load, and they would work constantly then,—both the relief or auxiliary and main needle.

“Q. 41. By Mr. Westall: But during the

time that you did not have this dipper dredge in operation how did the auxiliary needle-valve operate as to opening under changes of load?

“A. If we had other loads, which we did have, which was steady, the auxiliary stayed closed until some sudden surge of load would drop off causing the speed to run up and the main needle would naturally close and the auxiliary would open to give the relief water the water-hammer in the pipe-line.

“A. 43. I was officially in charge like I am now of the plant until August 15, 1913.

“Q. 44. What was your connection with the plant prior to that time and during the four years that you have mentioned?

“A. Much the same as I am now. I was operator, only we were running more shifts.

“A. 47. Well, there was for three years of the time that that auxiliary or relief and the main needle were operating continuously, due to heavy fluctuations in the load. But since August 15th of last year the load has been practically steady and the auxiliary has had no chance very much, only to remain closed.

“Q. 50. State whether or not during ordinary operation of the plant when the needle of the auxiliary nozzle is in its ordinary closed position, as you have testified to, water escapes constantly or at all through the auxiliary relief nozzle.

“A. It does.

“Q. 74. By Mr. Westall: I would call your attention to Complainant's Exhibit V and ask if you understand the construction, uses and

purposes of the device such as therein attempted to be illustrated, and, if so, to state briefly what you conceive to be represented by the exhibit referred to.

“A. The part marked ‘Water Gate Stem, M. M.’ is the main needle and nozzle. The part marked ‘By-pass Valve Stem’ is the auxiliary nozzle and needle.”

*And under cross-examination Witness McAfee testifies.*

“Q. 93. All of these photographs represent from varying view-points and in different details parts of Division Creek No. 2 power plant on the line of the aqueduct of Los Angeles, California, such power plant being situated in Inyo County near the town or city of Independence? Is that not correct?

“Mr. Westall: The same objection.

“A. Yes, sir. It is 12 miles from that town. That is our post-office.

“Q. 112. Then this governor apparatus is operated to act upon the water-wheel needle and the by-pass needle so as to change their position, then their positions are changed due to the changes in speed of rotation of the water-wheel shaft? Is that not correct?

“A. Yes, sir.

“Q. Now, excepting when the auxiliary needle is returning independently to a certain position, that is, independently of the water-gate needle, this auxiliary needle moves inversely to the water-gate needle, does it not? That is, in a direction opposite of that in which the water-gate needle is moving?

“A. It does that in case the main needle closes. The other one will move in reverse. That is, it will open.

“Q. 116. I mean at these times the movement is in the opposite direction. If one is closing the other is opening?

“A. Yes, sir.

“Q. 117. And the water-gate needle—and I use this term as distinguished from the main water-gate that you have testified about—which I take it naturally shuts off the water and is shown in the upper central portion of Complainant’s Exhibit H,—is mechanically connected with your auxiliary needle so as to cause this inverse movement of the two needles. Is that not correct?

“A. Yes, sir.

“Q. 121. There is also a means provided at this plant whereby the water-wheel needle and the auxiliary needle may be jointly or at the same time or inversely and oppositely moved by hand?

“A. Yes, sir.

“Q. 122. And that is the part marked ‘Hand Operating Lever’ in Complainant’s Exhibits J and K, is it not?

“A. It is marked ‘Hand Operating Lever.’

Q. 123. This may be used to work the two needles, namely, the water-wheel needle and the auxiliary needle, simultaneously or at the same time, and inversely or oppositely through the rock-shaft or the like which swings on connecting rod II in Complainant’s Exhibit HH?

“A. Yes, sir.



“Q. 124. And it is through that same connecting rod II that the two needles are operated by the features under control of the speed sensitive fly-balls. Is that not correct?

“A. Yes, sir; where it is not the hand control. I thought you were dealing with the hand control.

“Q. 125. I was, and now I am asking if the same motions are not imparted to oppositely move the main and auxiliary needles referred to through the same connecting rod when the governor is acting under control of the fly-balls. Is that not correct?

“A. Yes, sir.

“Q. 128. But when they move in a closing direction the auxiliary needle will be moved in an opening direction, will it not?

“A. Yes, sir.

“Q. 129. And if then the motion of the main needle be reversed and the main needle be worked in an opening direction, the auxiliary needle will be moved in a closing direction, will it not?

“A. Yes, sir.”

Clearly the defendant's device contains the slow return to normal position, and this normal position may be adjusted to suit the requirements of any individual plant.

Complainant's Expert Cory, T. p. 521 to 526,  
466, 279, 2319, 485;

Defendant's Expert Cobb, 713, Ans. 255.

The defendant's device wastes water to prevent inertia effect, *during governing* and if so adjusted, saves it, *after* the governing period and "time element" has been introduced, by slow return of the by-pass valve. The Lyndon device wastes water to prevent inertia effect, *during governing* and if so adjusted saves it *after* the governing period "time element" has been introduced, by slow return of the by-pass valve (Comp. Ex. A, patent in suit, specifications, p. 4, lines 80 to 98); that is, the velocity of the water in the pipe has been changed to suit the new load after the elapse of the "time element being taken care of in the by-pass;" and there will be flowing from the pipe just the necessary water to carry the load. This is of the essence of the Lyndon invention and *is water economy*. If the velocity of the water from the source of supply (the pipe) is varied to suit the load, the quantity is varied in the same proportion, as it is elementary that the quantity is proportional to the velocity multiplied by the cross section of the supply pipe; and as the cross section of the supply pipe is constant, the quantity will vary directly as the velocity. Hence Lyndon attains the maximum water economy consistent with quick governing and prevention of dangerous or damaging inertia effects. If defendant's by-pass does not discharge water, at least *during governing* then why use a by-pass under the governor control at all? McAfee says it did at all times *during governing*.

Bearing in mind the fact that it is perfectly proper, although not necessary, to read the friction-

less by-pass valve of the Lyndon patent into Claims 6, 7 and 8 thereof, the trial Court admits, at the bottom of pages 71 and 72 R. that there is proper ground for finding infringement in this case. We believe that the trial Court in his very conclusions has laid a proper and strong foundation for the reversal of the decree in this case and of finding infringement as well as validity.

Further, on page 72 T., the trial Court admits the propriety of extensive application of the doctrine of equivalents and when your Honors have found the Lyndon claims readable on the alleged infringing devices you can clearly adopt the said views in favor of complainant, and find infringement in this case.

The assignments of error on this appeal, appearing at T. p. 52, are respectfully called to your Honor's careful consideration in addition to the foregoing observations and the findings and conclusions of the trial Court.

The Court finds nothing against the validity of any of the claims of the patent and has paved the way for a finding of infringement even under an unnecessarily forced application of the doctrine of equivalents.

We submit that a reversal of the decree will be found to be wholly justified upon the record.

## LYNDON'S INVENTION AND THE ALLEGED PRIOR ART.

In bearing upon the breadth and import of the invention of the patent in suit, we wish to quote here Claims 3, 4, 6, 7 and 8 thereof:

*“3. In a water-wheel governor, the combination with a water-gate-operating shaft, and means for operating same in either direction to govern the water-wheel, of a controller for said operating means, responsive to changes of speed of the water-wheel, a returning device for said controller provided with a clutch connection to said operating-shaft, and means, actuated by said controller on movement thereof from normal position to engage said clutch with the said shaft, so as to cause the return of the controller to normal position and interrupt the governing action before it has overrun the proper amount, substantially as and for the purpose set forth.*

*“4. In a water-wheel governor, the combination with a water-gate-operating shaft, a driving-shaft and reversing clutch-gear, adapted to turn the water-gate-operating shaft in either direction, a controller, responsive to changes of speed of the water-wheel and controlling such reversing-gear, and a returning device for said controller provided with actuating means controlled by said controlling means to return the controller to inoperative position, so as to prevent excessive movement of the governor.*

*“6. In a water-wheel governor, the combination with means for operating the water-gate in either direction, a by-pass for the water-wheel, and a valve controlling said by-pass, of means connected to the water-gate-operating*

*means and operating the by-pass valve inversely to the operation of the water-gate.*

*“7. In a water-wheel governor the combination with means for operating the water-gate in either direction from normal position, a by-pass for the water-wheel, and a valve for such by-pass, of means connected to the water-gate-operating means and adapted to operate the by-pass valve from normal position in either direction, so as to control such valve inversely to the control of the water-gate, during the governing action of the water-gate, and means for returning the by-pass valve to normal position on completion of governing movement of the water-gate-operating means.*

*“8. In a water-wheel governor, the combination with a shaft for operating the water-gate in either direction from normal position, a by-pass for the water-wheel and a valve for such by-pass normally held in partly-open position, of an operating device for said valve provided with means for returning the valve to normal position, a clutch, adapted to connect said operating device for the by-pass valve with the water-gate-operating shaft to control the by-pass valve inversely to the water gate, reversing means for operating the water-gate-operating shaft in either direction, a controller, responsive to the speed of the water-wheel and controlling said reversing means, and means operated by said controller to bring the aforesaid clutch into operation and to release said clutch when the governing action is effected.”*

These claims stand upon the face of the record as absolutely unanticipated. The Swiss and French alleged patents, neither of which shows a positively, inversely coupled water gate and by-pass valve with



# TABLE OF DATES

LAMAR LYNDON	BAKERSFIELD	NEWTON LAMB	C. S. ENGLISH	EARL P. WET-MORE	IRENE SCHAAD Swiss	ESCHER-WYSS French	N. LOMBARD	N. LOMBARD
The inventor and patentee of patent in suit.	Alleged public use.  Cobb report August, 1896. Cobb efficiency report, Aug., 1897. Apparatus shown inoperative and abandoned immediately thereafter.	This has been set up by defendant as a prior publication.	U. S. Patent alleged to anticipate.  Application, Dec. 23, 1893. Patent issued June 5, 1894. No. 521,086.	U. S. Patentee, alleged prior inventor.  Application Jan. 16, 1894. Patent issued May 8, 1894. No. 519,597.	Foreign Patent alleged to anticipate.	Foreign Patent alleged to anticipate.	U. S. Patentee, alleged prior inventor.  No. 533,656. Filed Aug. 4, 1894. Issued July 5, 1895.	U. S. Patent set up by Complainant in rebuttal to prove the adoption by Lyndon invention as applied to Lombard's earlier patented device.
Lyndon's return to U. S. from Japan May 28, 1898.  Disclosure to others between May 28, 1898, and early summer of 1898 by sketches and verbal.  Lyndon's drawings Nov. and Dec., 1898.  Efforts to interest purchasers, 1898.		<u>LYNDON ENTERS FIELD AS INVENTOR</u>						
Instructions to Marcelus Bailey, patent attorney, to file July 28, 1899.  Lyndon filed Caveat, Oct. 13, 1899.	Further experimental work on by-pass on Knight wheels probable date early in 1899.  By-pass and dynamo-meter finally and definitely abandoned.	<u>LYNDON APPLIES TO COMMISSIONER OF PATENTS FOR PROTECTION BY CAVEAT.</u>			Swiss, No. 17,536, received in U. S. Patent Office Sept. 2, 1899.			
Lyndon took to Knight Bros., patent attorneys, and instructed to file application for patent July 7, 1900.  Papers of application complete Sept. 8, 1900.  Application filed in Patent Office Sept. 13, 1900.  Patent issued Mar. 11, 1902. No. 695,220.  Lyndon was thereafter as before, diligent in efforts to introduce his invention to public use.		<u>LYNDON APPLIES TO COMMISSIONER OF PATENTS FOR PROTECTION BY U. S. LETTERS PATENT.</u>				French No. 291,688, received in U. S. Patent Office June 21, 1902.		
		Patent published, Feb. 26, 1901.			<u>U. S. LETTERS PATENT ISSUED TO LYNDON.</u>			Application Dec. 12, 1901. Issued Mar. 18, 1902.
SEE TRANSCRIPT OF RECORD PAGES:		Cobb, 718. Berry, 1141. Cory, 2291, 2293, 2331, 2323.	Cory, 2289, 2293.	Cory, 2290, 2293.	See objections on Record 541, 546, 597 and 891. Cory, 2294, 2350; Berry, 1356.	Cory, 2290, 2293. Berry, 1099, 1409. Ensign, 1494.	Henry, 2209-10-11. Ensign, 1501, 1503, 1504, 1506. Van Orden, 1757, 1771.	

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SEE TRANSCRIPT OF RECORD  
PAGES:

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546,

Cory, 2290, 2293.  
Berry, 1099, 1409.  
Ensign, 1494.

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means for inversely operating the same, or any positive means for slowly returning the by-pass valve to normal position, or any means for positively preventing the governor from "over-running," were excluded from evidence by the Honorable trial Judge, inasmuch as only purported certified copies were introduced, the alleged certification not being as required by statute. The certification purports to be merely that of certain officials in the foreign countries, and such official certifications have no standing in the Courts of this country, any more than mere unlegalized personal affidavits, the trial Court therefore refused to consider them. *However, the record in this case clearly shows the invention and disclosure by Lyndon, the patentee, prior to the date of publication of either of these Swiss and French patents.*

The record also shows that Lyndon disclosed his invention fully in the spring of 1898 to Meyer and immediately thereafter to a very large number of others. Very full corroboration of his early invention is recited by the various witnesses, who almost without exception are men in high standing.

On the subject of disclosure, attention is invited to the following testimony, Lyndon, T. p. 1859-1833.

Lyndon disclosed to Meyer, T. p. 1822, 1831, 2017, 2018, 2022, 2026, 1833.

Lyndon disclosed to Merrill, T. p. 1834, 1841.

Lyndon disclosed to Reid, T. p. 1834, 1838, 1839, 2019.

Lyndon disclosed to Bailey, T. p. 1892, 1905, 2040.

Lyndon disclosed to York Mfg. Co., T. p. 1845-7, 1903.

Lyndon disclosed to Knight, T. p. 1892, 1905, 2044.

The depositions of all the above witnesses were taken in the East and they all corroborate the statements of Lyndon. See especially that of Thorburn Reid, T. p. 2688, 2696 and 2697; Meyer, T. p. 2657, 2665; Edw. Lyndon, T. p. 2720, 2723, 2728.

The accompanying table of dates and the above testimony will show that neither the French or Swiss alleged patents could possibly invalidate that of Lyndon, even if they had been accepted as evidence before the lower Court.

This testimony clearly follows the teaching of *Yesbera v. Hardesty*, 166 Fed. (supra), and *Topliff v. Topliff*, 145 U. S., that fragmentary piecemeal anticipation is of no avail. Not a single example or specimen of the combinations of the Lyndon patent is found in the prior art.

It is not necessary to further call this Court's attention to the abandoned and discarded experiments, and their non-anticipatory nature. The case of *Stebler v. Parker*, 177 Fed. decided by your Honors, and many others, are in point. It is settled law that a mere abandoned experiment, and particularly where the result aimed at in such experiment is filled by the very invention of the patent in suit, cannot anticipate such patent.

The testimony disposes of: the alleged anticipating Lamb patent, *pleaded as a prior publication, but not prior to the date of the patent in suit*; the patent to English; the patent to Wetmore; and the

GRAPHIC SHOWING OF LYNDON'S DILIGENCE.

Lyndon conceives his invention  
discusses to others and endeavors to  
interest Engs. of McIntosh-Seymour Co.  
without success.  
Endeavors to interest American Impulse

Water Wheel Co., without success.

Endeavors to interest York Mfg. Co.  
without success.

Consent through York Mfg. Co. & Marcellus  
Emiley

Instructed Knight Bros. to apply for pat.  
Application for patent filed

before June 15th, 1898

during summer of 1898

summer, autumn and winter 1898

spring of 1899

summer of 1899

autumn of 1899

winter of 1899

Lyndon testi-  
fies and con-  
firming witness:  
EDW. LYNDON

MEAD

MEAD

SHIPLEY

" "

" RAILLY

"

July 8th, 1900

KNIGHT

Sept. 13th, 1900

KNIGHT

file  
wrap-  
per  
of  
pat-  
ent  
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suit

Pat. issued to Lamar Lyndon \$695,220

March 11, 1902

Endeavored to sell to or secure roy-  
alty from numerous blads, of water  
wheel & govs. & users without suc-  
cess even after notice of infring-  
ment-- among these were:

Allis Chalmers Co. ) was never  
Pelton Water Wheel Co. ) financially  
Great Northern Pwr. Co. ) able to  
Leahard Governor Co. ) prosecute  
I.P. Morris Co. ) a suit a-  
Woodward Governor Co. ) gainst any  
Ludlow Valve Co. ) infringer

Lyndon's Patent  
\$695,220

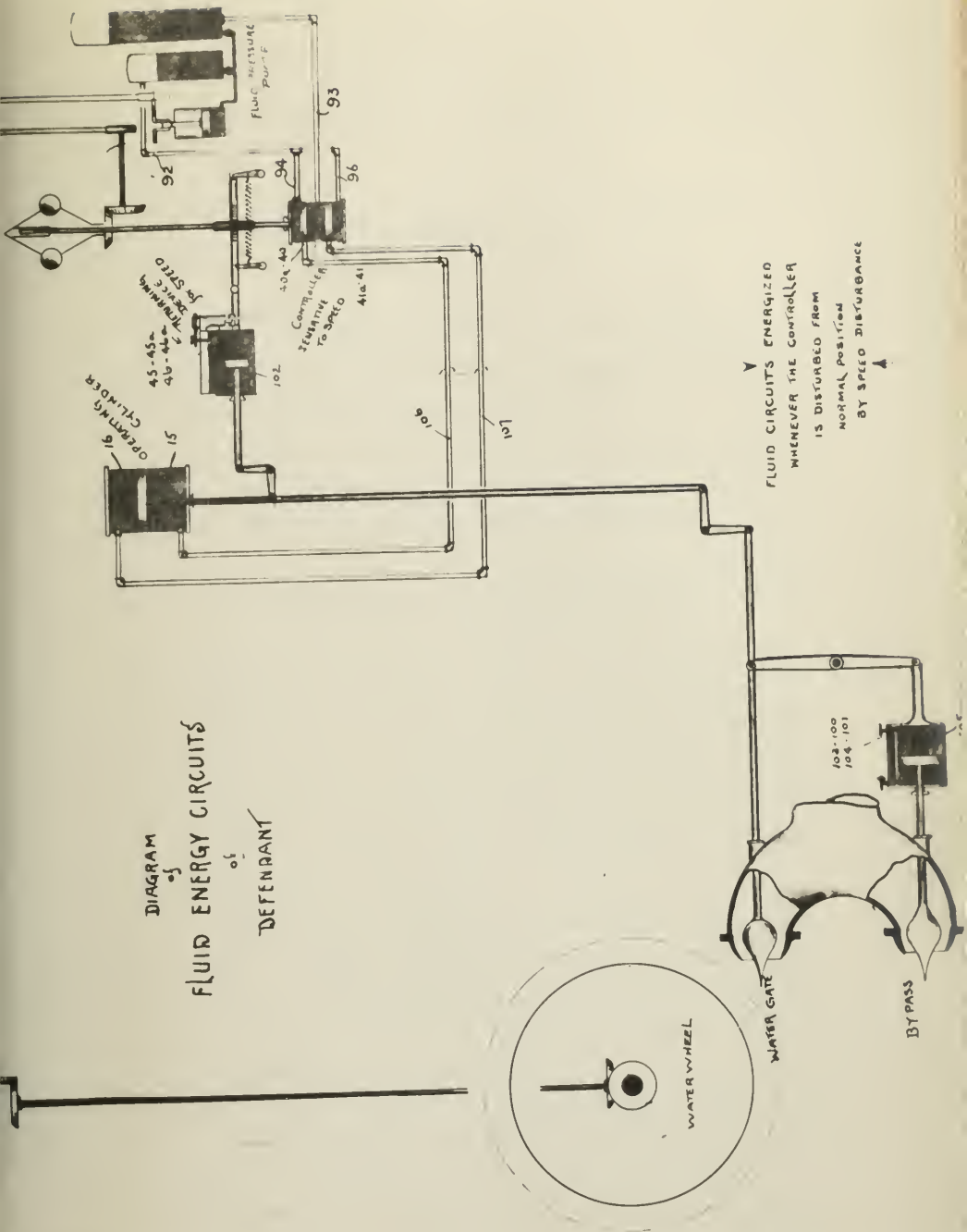
Finally entered into negotiations  
with and sold to Henry Complainant in  
this case.

GRAPHIC SHOWING OF LYNDON'S DILIGENCE.





DIAGRAM  
of  
FLUID ENERGY CIRCUITS  
of  
DEFENDANT



FLUID CIRCUITS ENERGIZED  
WHENEVER THE CONTROLLER  
IS DISTURBED FROM  
NORMAL POSITION  
BY SPEED DISTURBANCE



earlier patents to Lombard, as well as the abandoned experiment of the so-called Bakersfield device.

### THE LYNDON PATENT AND INFRINGEMENT THEREOF.

All of the working elements of the Lyndon invention are mechanical parts, operating by mechanical means, in mechanical movement.

In the specific form illustrating the invention Lyndon has chosen fluid (electrical) circuits to transmit movement from certain parts to certain others. In the devices of defendant fluid (oil circuits) are employed to transmit movement from certain parts to certain others.

The testimony of Prof. Cory, Dean of the College of Mechanics of the University of California, and appearing in the transcript, pages 2334 to 2345, is convincing on the equivalence of the two devices. See also Def. Expert Berry, 899, latter part of Ans. 5, also 1310, Ans. 867.

The accompanying diagram of energy fluid circuits of infringing structures is self-explanatory on this point. The figures are the same as appear on similar parts of the Lyndon diagrammatic drawing, Fig. 1 of the patent in suit.

We have here inserted photographic copies of Complainant's Exhibits E, F, H, I, J, K, U and V, to facilitate the reading of the record thereon.

The testimony on infringement and the infringing apparatus appears more particularly as follows:

Complainant's Exhibits illustrating the defendant's apparatus and descriptions thereof and comparison with the Lyndon patent. Scattergood, T. p. 171 to 179, 537; by Heinze, 192, 193; Henry, 134 to 143, and 148 to 156, 297, 216 to 225, 207, 315; Cory, 265, 279, 411, 440, 443, 490, 430, 431, 433, 437; Lyndon, 1946 to 1954. Defendant's Expert Cobb, 643, 873, 874, 878, 879.

*Defendant's Witness McAfee, who operated the devices for years, and who is the only witness who is shown to have had any positive knowledge of the operation of the infringing machines, has given a very clear and logical account of how the parts worked, and while his entire deposition is of interest, the following is particularly pertinent:* T. p. 1545, Ans. 34; 1548, Ans. 47, re Lyndon Claim 6; 1549, Ans. 50, re Lyndon Claim 7.

Continuous use, 1581, 1582, 1583, and general operation 1555 to 1572. Adjustment of the bypass, 1593; not used for water economy but to prevent pressures, 1591. See also Def. Expert Berry, 1131.

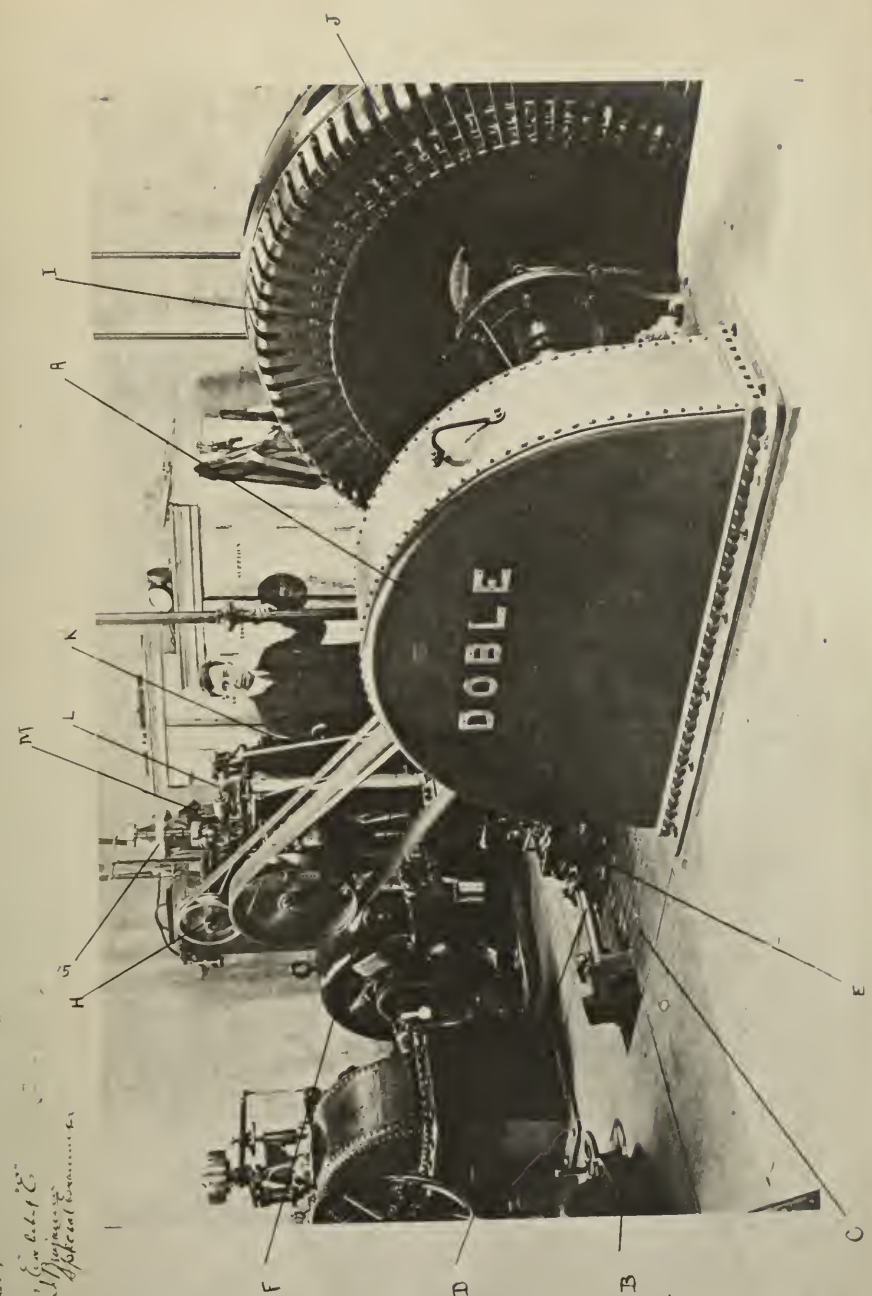
Def. Expert Cobb, as to the Lyndon claims, 643, 873, 874, 878, 879.

Def. Expert Berry concedes the infringing apparatus acts as a bypass discharging water *during* governor action, 1040, 1041, 1042, 1043, and that said bypass is to relieve the inertia pressures, 1131.

It is immaterial that gearing is shown in the patent in suit for setting up a proper drive relation to actuate the water gate and by-pass valve, and that a hydraulic cylinder and piston is used in the defendant's devices. Equivalence clearly exists, as



The Great Central Engine Works of  
 the London & North Western Railway  
 Co. Ltd. } the Great  
 City of London } No. 1714  
 1894  
 Great Central Engine Works  
 of the London & North Western Railway  
 Co. Ltd. } the Great  
 City of London } No. 1714  
 1894





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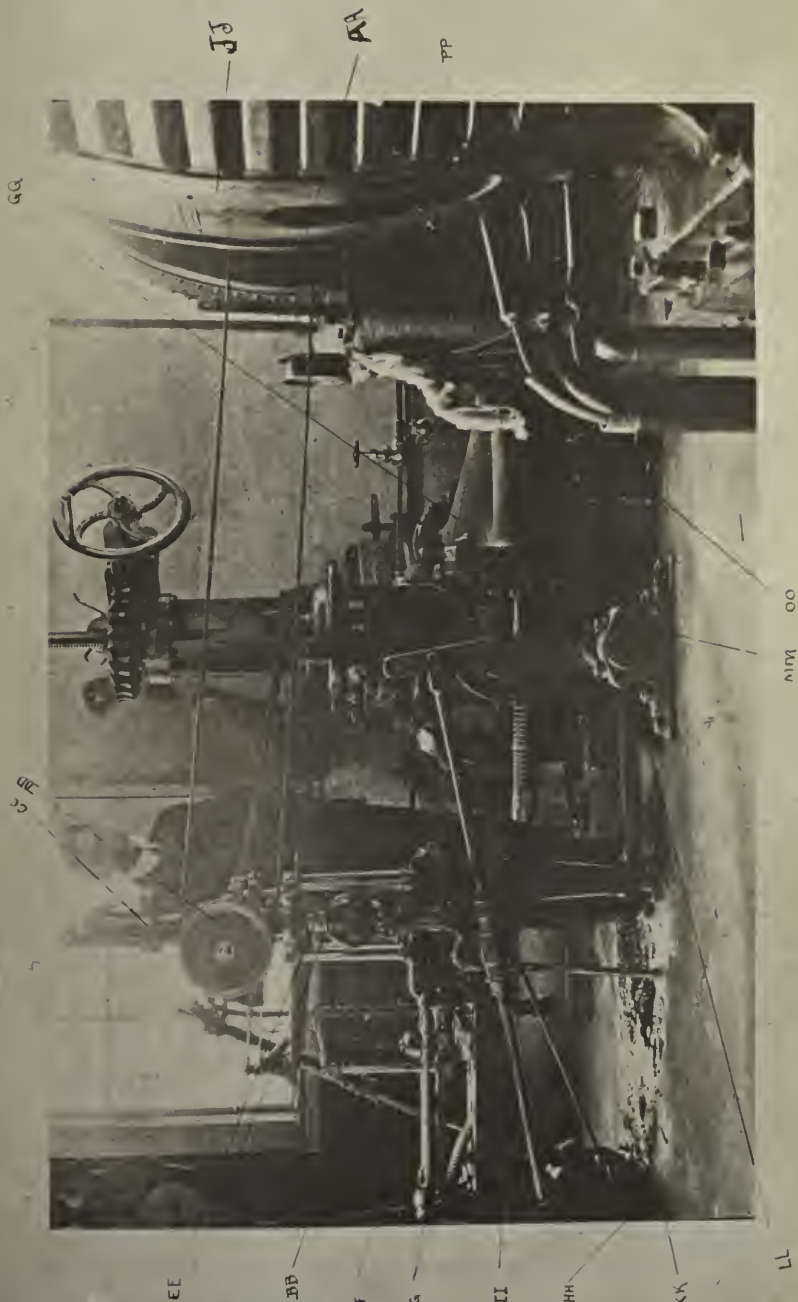


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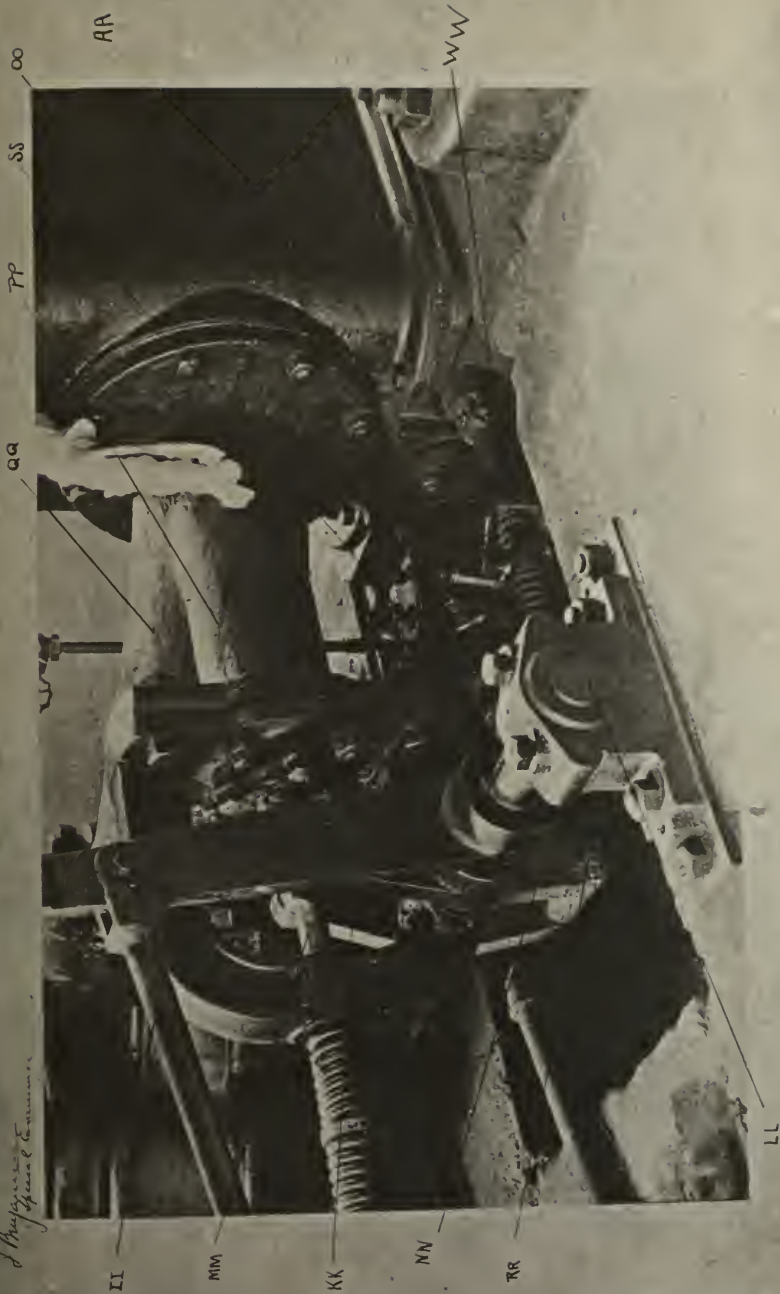




Thos. Weston & others, West of  
 California, South, & Kingston  
 Geo. J. Henry, Jr., Comp. } In Equity.  
 Chas. J. Fox, Applicant } No. 107-A.

Wm. M. Van Dyke, Clerk  
By Wm. M. Van Dyke Attorney for Petitioner

June 15, 1914 J. M. Thompson  
Special Commissioner





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1911

WM. M. VAN DUSEN, CLERK

By *[Signature]* 11-1911

U.S. Dist. Court, Southern Dist.  
 of California at Southern Division  
 Geo. H. Hays, Jr., Compt. (Deputy)  
 City of Los Angeles, (Left) No. 1-11  
 Complaints, Robert J.  
 Jan 11, 1911  
*[Signature]*

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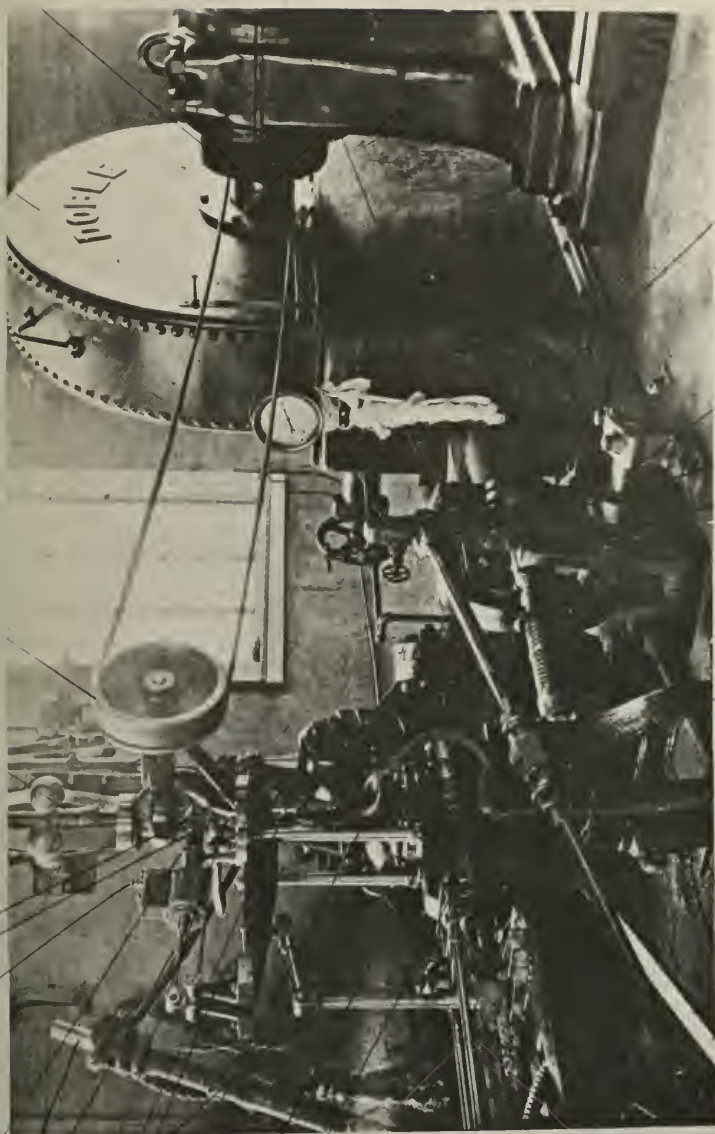
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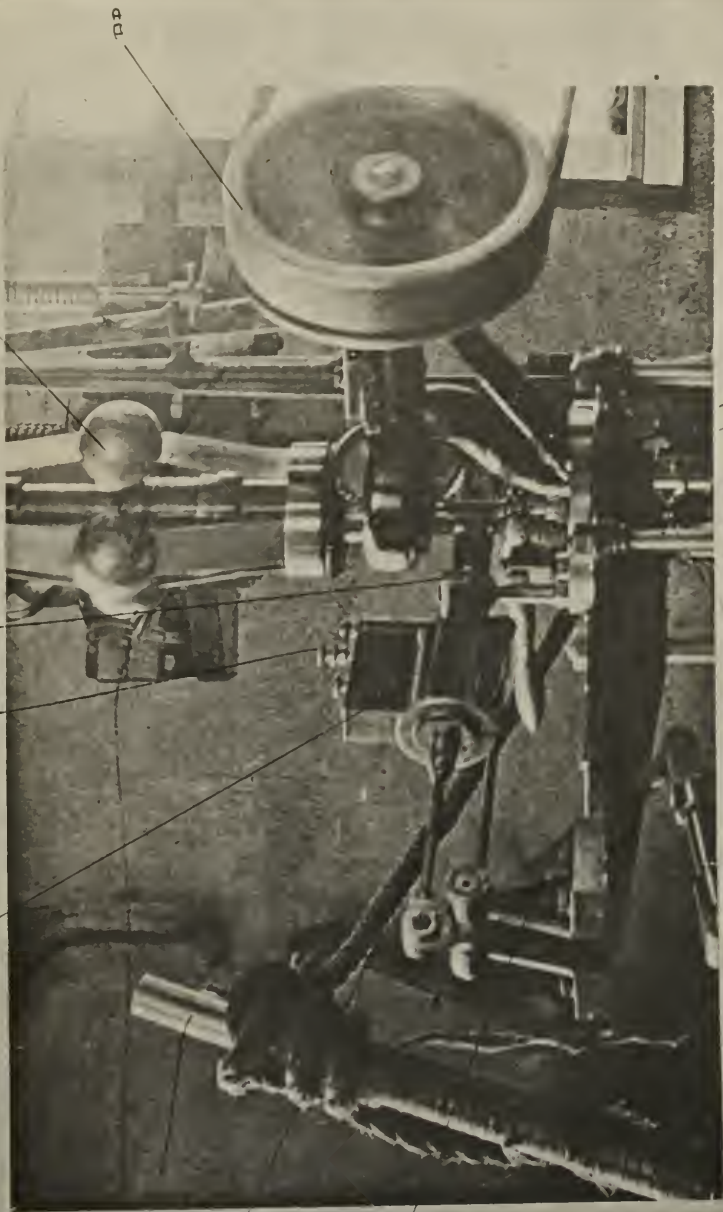


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1915

W.M. VAN DYKE, Clerk  
By \_\_\_\_\_  
Treasurer of the Board

Hand operating lever  
City of Los Angeles  
Comptroller's Office  
Jan 11 1915  
S. J. [illegible]  
S. J. [illegible]



Hand operating lever

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in *Ries, et al. v. Barth Manufacturing Co.*, 136 Fed. 850 (supra), and in the further most pertinent case decided by the Supreme Court, *Blake v. Robertson*, 94 U. S. 732, of this, and in this connection, *Walker on Patents*, 4th edition, page 311A, says:

“However, in one case, the Supreme Court went to the length of deciding a confined column of water in a cylinder, worked by a pump and working a piston, to be an equivalent of a combination of a vibrating arm, toggle joint, and other mechanical devices, when used to transmit vibratory power.”

This case substantiates our contention as to equivalents, and we have still to bear in mind the tremendous scope and breadth of the claim of the patent in suit, and that the specific showing of the drawings of the patent in suit is merely the one form used by the patentee in illustrating his basic invention.

Complainant's exhibits KKK and KK show respectively in detail the infringing structures at the two plants of the Los Angeles aqueduct and references are pasted on Ex. KK to show the application of the several claims thereto. (The figures following the letters refer to the claim number in each instance. Taking the letters in sequence will be found the elements of each respective claim. Thus A3, B3, C3, D3, and E3 are the specific elements in the Lyndon claim 3.) There is no substantial departure between the two plants of defendant, all of the elements being equally found in both. T. p. 162, 411, 412, 413, 472, 473.

The testimony clearly shows the utilization by defendant of the invention of the patent in suit, to obtain the same results in the same manner, and by clearly equivalent means, or by such means as are thoroughly and broadly and properly covered by claims 3, 4, 6, 7 and 8. Unless these claims are infringed by defendant's structures the whole system of protecting inventions by patents becomes farcical. Either Lyndon's invention must be found to be broadly covered, or else the government entered into an unconscionable contract with Lyndon, a contract based upon false pretensions and for which Lyndon paid his fees to the government upon the basis of such false representation by the latter. We respectfully assert this, under the doctrines of all the leading cases, pertinent to the proper breadth of protection of broad and basic inventions. T. p. 207, 265, 443, 537.

It is to be noted that defendant utilized the same elements *in kind, character, performance and accomplishment of result, that are claimed in the Lyndon patent, such as the water gate, by-pass valve, inverse operating means for the water gate and by-pass valve, means for slowly returning the by-pass to normal position after its movement accompanying the movement of the water gate, and the various elements acting to prevent over-running of the governor.*

Surely a patentee must be protected as against the use by another of the very devices falling within the language allowed him in his claims.

## THE CLAIMS OF THE LYNDON PATENT

## APPLIED DIRECTLY TO THE INFRINGING STRUCTURES.

[The letters following the elements of each claim are to be found on Division Creek and Cottonwood apparatus, and inserted at the corresponding element on the illustrations between pages 56 and 57.]

### LYNDON CLAIM (3).

In a water wheel governor, the combination with a water-gate-operating shaft **(A)**, and means for operating same in either direction to govern the water wheel **(B)**, of a controller for said operating means, responsive to changes of speed of the water wheel **(C)**, a returning device for said controller provided with a clutch connection to said operating shaft **(D)**, and means, actuated by said controller on movement thereof from normal position to engage said clutch with the said shaft, so as to cause the return of the controller to normal position and interrupt the governing action before it has over-run the proper amount, substantially as and for the purpose set forth **(E)**.

### LYNDON CLAIM (4).

In a water-wheel governor, the combination with a water-gate-operating shaft **(A)**, a driving shaft **(F)** and reversing clutch-gear, adapted to turn the water-gate-operating shaft in either direction **(B)**, a controller, responsive to changes of speed of the

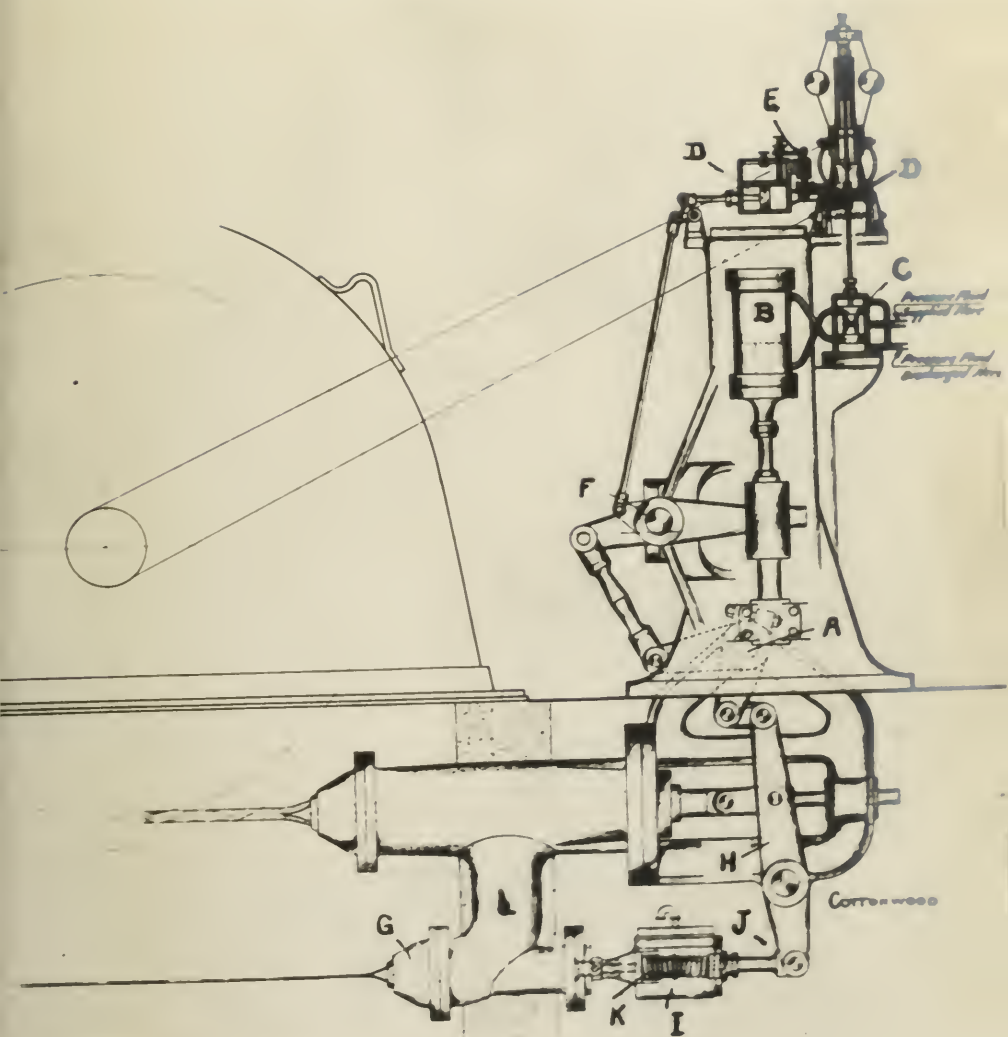
water-wheel and controlling such reversing-gear **(C)**, and a returning device for said controller **(D)** provided with actuating means controlled by said controlling means to return the controller to inoperative position, so as to prevent excessive movement of the governor **(E)**.

#### LYNDON CLAIM (6).

In a water-wheel governor, the combination with means for operating the water-gate in either direction **(B)**, a by-pass for the water-wheel **(L)**, and a valve controlling said by-pass **(G)**, of means connected to the water-gate-operating means and operating the by-pass valve inversely to the operation of the water-gate **(H)**, **(I)**, **(J)**.

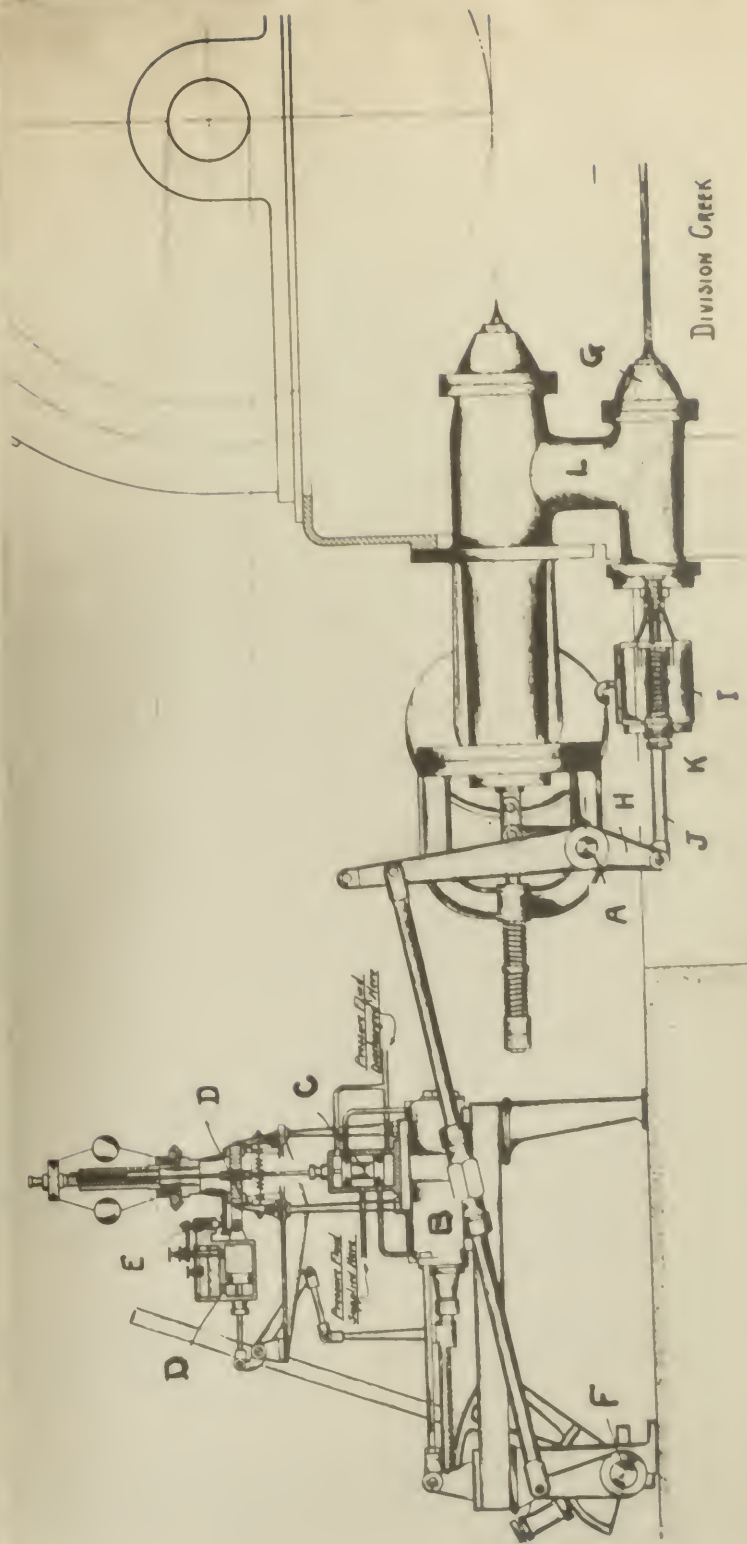
#### LYNDON CLAIM (7).

In a water-wheel governor, the combination with means for operating the water-gate in either direction from normal position **(B)**, a by-pass for the water-wheel **(L)**, and a valve for such by-pass **(G)**, of means connected to the water-gate-operating means and adapted to operate the by-pass valve from normal position in either direction, so as to control such valve inversely to the control of the water-gate, during the governing action of the water-gate **(H)**, **(I)**, **(J)**, and means for returning the by-pass valve to normal position on completion of governing movement of the water-gate-operating means **(K)**.









DIVISION CREEK



## LYNDON CLAIM (8).

In a water-wheel governor, the combination with a shaft for operating the water-gate in either direction from normal position (**A**), a by-pass for the water wheel (**L**), and a valve for such by-pass normally held in partly-open position (**G**), of an operating device for said valve (**J**) provided with means for returning the valve to normal position (**K**), a clutch, adapted to connect said operating device (**K**) for the by-pass valve with the water-gate-operating shaft to control the by-pass valve inversely to the water-gate (**I**), reversing means for operating the water-gate-operating shaft in either direction (**B**), a controller, responsive to the speed of the water-wheel and controlling said reversing means (**C**), and means operated by said controller to bring the afore-said clutch into operation and to release said clutch when the governing action is effected (**H**).

The Courts have repeatedly said that where the claims of the patent read clearly upon the defendant's structure, and the gist or kernel or effect of the invention is clearly present in the latter, infringement must be found. On this point we call the Court's particular attention to the following authorities:

Walker on Patents, at the end of section 346, 4th edition, page 304, as follows:

“Harmoniously with its decision in *Burr v. Duryee*, the Supreme Court has since had a positive tendency to disregard whatever is abstract

and intangible in questions of infringement, and to base its conclusions upon the concrete features of the issues at bar.”

It is said in *Scott et al. v. Fisher Knitting Mach. Co. et al.*, 145 F. 915, 918 (2nd Cir. 1906),

“A patentee is entitled to all the beneficial uses to which his invention can be put and in order to hold an infringer it is not necessary that he should indicate every use in his statement of the objects of his invention.”

In the recent case of *Jackson Fence Co. v. Peerless Wireless Fence Co.*, 228 Fed. 691, at p. 692, syllabus 4:

“A patentee is entitled to the benefit of every function within the scope of the claims and actually possessed by his mechanism, even if he does not know of it at the time of patenting, and it is not necessary that he should enumerate its advantages.”

Also:

“It is not necessary for a patentee to describe in detail all the beneficial functions which he claims will result from his invention; but it is enough if such functions are evident and obviously contribute to the success of the invention, and they may in such case properly be taken into account, in estimating its novelty and utility. (Decree 146 F. 552 reversed.)”

*General Electric Co. v. Bullock Electric Mfg. et al.*, 152 F. 427 (6th Cir. 1907).

“A patentee who has sufficiently described and distinctly claimed his invention is entitled

to every use to which his device can be applied, whether he perceived or was aware of all such uses at the time he secured his patent or not. (For other cases, see Patents, Cent. Dig., Sec. 263; Dec. Dig., Sec. 185.)”

Acme Truck & Tool Co. v. Meredith, 183 F. 124.

“A patentee is entitled to have his patent considered with reference to an advantage over the prior art necessarily secured by the operation of the device as described, even though such advantage is not specifically claimed or fully set forth in the specification. (For other cases, see Patents, Cent. Dig., Sec. 241; Dec. Dig., Sec. 165.)”

Morgan Engineering Co. v. Alliance Mach. Co., 176 F. 100.

“An inventor is entitled to all that his patent fairly covers, even though the complete capacity is not recited in the specification and was unknown to him prior to the patent issuing. (For other cases, see Patents Cent. Dig., Sec. 243; Dec. Dig., Sec. 167.)”

Stromberg Motor Devices Co. v. John A. Bender Co., 212 F. 419.

As said in Eck v. Kutz, 132 Fed. 758:

*“The question is whether the inventive idea expressed in the patent has been appropriated; and, if it has, infringement has been made out.”*

Judge Nelson in Tatham v. LeRoy (2 Blatchf. 486), says:

*“Formal changes are nothing,—mere mechanical changes are nothing; all these may be made outside of the description to be found in the patent, and yet the machine, after it had been thus changed in its construction, is still the machine of the patentee, because it contains his invention, the fruits of his mind, and embodies the discovery which he has brought into existence and put into practical operation.”*

As said by the Supreme Court in *Hobbs v. Beach*,  
180 U. S. 383:

~~*“If there be one central controlling purpose deducible from all these decisions, and many more that might be quoted, it is the steadfast determination of the court to protect and reward the man who has done something which has actually advanced the condition of mankind, something by which the work of the world is done better and more expeditiously than it was before.”*~~

*“The object of the patent law is to secure to inventors a monopoly of what they have actually invented or discovered, and it ought not to be defeated by a too strict and technical adherence to the letter of the statute or by the application of artificial rules of interpretation.”*

*Topliff v. Topliff*, 145 U. S.

(Our italics.) *juvenile*

*McLain v. Ortmyer*, 141 U. S. 425:

*“In a case of doubt, where the claim is fairly susceptible of two constructions, that one will be adopted which will reserve to the patentee the actual invention.”*

We also quote from *Ryder et al. v. Lacey*, <sup>200</sup>220 Fed. Rep., page 966, as follows:



(Syl.) “Unless a patentee has especially limited himself to a specific form of construction, or such limitation is imposed by the prior art or by the action of the patent office, acquiesced in by him, he is entitled to a broad construction of his claims *in accordance with the language thereof.*”

*insert*

~~Also~~ on page 514 et seq:

“We find nothing upon the face of the patent requiring the claim to be limited to rolls which had these flanges attached to and integral with the rolls. It is true that neither by drawing nor specification does Fell suggest the performance of this function by stationary parts of the frame, but this is not necessary. In the absence of something clearly showing that the patentee did intend to have his grant confined to a specific form, a broad and generic claim may rightfully stand on a mere specific disclosure; and the invalidity of such a claim (if it is invalid) will result, not from the applicant’s failure to use more sweeping language in his specification, but from the state of the art limiting the actual invention. *The claims are part of the description required by statute, and in them, and not in that part of the description which is now commonly called ‘specification,’ is the proper place in which to define the breadth of the invention,* as was most accurately apprehended by Fell’s solicitor when he (though quite unnecessarily) said that various changes might be made ‘without departing from my invention as defined by the appended claims.’”

Also we refer to *National Tube Co. v. Mark et al.*, 216 Fed. 507, a decision of the Circuit Court of Appeals of the Sixth Circuit, as follows:

(Syl.) “Where a patent contains both a

broad and a narrow claim, the court cannot construe into it a limitation not therein expressed, but which is expressed in the narrower claim, and by which alone one is distinguished from the other.”

Also, *Hess-Bright Mfg. Co. v. Fitchel et al.*, 219 Fed., at page 729 (C. C. A.), as follows:

“Such being the case, it follows that the claims granted should receive the construction their language naturally imports (*Dodge Needle Co. v. Jones* (C. C.), 153 Fed. 189, and 159 Fed. 715, 86 (C. C. A.) 191), and that no statement or action of the patentee in obtaining his patent estops him from claiming to the full extent what his claims on their face purport.”

It surely will not be necessary in support of our contentions to more clearly point out the leading objects of the invention than to refer to the opening passages of the specification of the patent; in view of the findings and conclusions of the Court (Tr. p. 62), it is evident that the patentee, by his specification and claims and testimony in this case, had in mind the broad and important nature of his invention and that the title of the invention merely specified the particular type of water wheel to which the governor was applicable. That is, the governor was for an *electro-mechanical water wheel*; a water wheel for use in mechanically driving electrical generators. The title fully supports this in its grammatical construction. The question is, however, what was Lyndon's invention? What did he do over the prior art? What did he claim? These questions must be an-

swered in terms of broad interpretation of the patent. Next, does the defendant come within the monopolistic territory of the patent in suit?

*The lower Court says, "The defendant's device has been highly successful from the time of its installation, and since then has been actually producing the useful result claimed for the Lyndon patent." Hence the results are found to be identical.*

A finding of infringement is unavoidable.

The Circuit Court of Appeals for the 7th Circuit, said in a recent decision, 230 F. 157, at page 162:

(3) "In determining an alleged infringement the court should have in mind the true worth of the claim as measured by the inventor's contribution to the art, and should remember that each claim of a patent is in law a separate invention."

The patent in suit contains the broadest kind of claims for an invention clearly copied in substance by the defendant, and there was clearly error in the lower Court's finding of non-infringement of the admittedly valid claims of the patent.

It is to be noted that the record in this case is to a large extent filled with a hair-splitting discussion of the operation of detail parts, caused by an obvious attempt of defendant to make it appear that the Lyndon invention was to be shackled by limiting consideration of such things as immaterial electromagnets and electrical circuits which are merely the well-known expedients for setting mechanical features into operation. Such a large amount of dust of this nature was thrown into the eyes of the trial

Court that defendant succeeded in disrupting, apparently, the high lights of the invention to such an extent that it escaped a finding of infringement due to the resultant impairment of judicial vision. Your Honors, it is believed will not be blinded by any such attempt.

Within the doctrine of *Stebler v. Riverside Heights*, 205 Fed. 735, and the cases cited therein, and the many authorities herein quoted and cited, it is clear that infringement should be found when, as in the case at bar, the substance of the invention has been appropriated by the defendant.

We call the Court's attention particularly to the acquiescence of the patent by Doble and the Pelton Water Wheel Company and the Pacific Gas & Electric Co., as per the following exhibits and papers in the transcript.

As pointed out above, the Pelton Water Wheel Co. petitioned to and were allowed to intervene, filed an answer and an amended answer, participated extensively in the defense, hundreds of pages of defendant's record being taken in the office of its attorneys, and in the presence of its engineer Doble (T. p. 1299-1583-167) and subsequently withdrew on stipulation (T. p. 87) after paying the complainant in this case a large sum of money and other valuable considerations for a license under the patent in suit (T. p. 2480-2484-2486-2504). This company acknowledged fully the validity of the said patent when taking its license; although opposing it earlier when Lyndon called attention to it and asked for an accounting.

(Witness Lyndon T. p. 1974, 1992, 1994, 2003, 2135.)

The Pacific Gas & Electric Corporation also took a license and acknowledged validity of the said patent at the same time as did the Pelton Co.

As soon as an owner of the patent in suit was able financially to enforce the rights granted by the patent (and the record clearly shows that Lyndon never was and also never knew of the infringement in this suit prior to testifying in the case), the largest companies in the manufacture and use of the apparatus of the kind concerned, flew to attack the patent in suit, only to later take licenses thereunder, for valuable consideration, and withdraw from the fight.

While possibly the appellant may not recover as heavily for infringement against the appellee because of the relative minor infringements in Inyo County, as it might because of the larger plants installed for the appellee by the Pelton Water Wheel Company, now a licensee, nevertheless, the appellant and said Pelton Water Wheel Company are, we submit, entitled to an adjudication of the patent as valid and infringed.

~~In closing we wish to quote from Hobbs v. Beach, 180 U. S. 383, bearing in mind how Lyndon revolutionized the art of water wheel governing for hydro-electrical generation and the benefits to mankind resulting. We quote as follows:~~

~~“If there be one central controlling purpose deducible from all these decisions, and many more that might be quoted, it is the steadfast determination of the court to protect and reward the man who has done something which has ac-~~



~~tually advanced the condition of mankind, something by which the work of the world is done better and more expeditiously than it was before."~~

As to the breadth of the patent in suit, the following quotation from the "Fixed Law of Patents," second edition, by Macomber, are highly significant (see pp. 447 and 448):

"Norton being the original inventor, he, and those claiming under him, would have the right to treat as infringers all persons who make devices or machines operating on the same principle and performing the same functions by analogous means or equivalent combinations, even though the infringing machine may be an improvement of the original, and patentable as such.—Norton v. Jensen, 49 Fed. 859; 1 C. C. A. 452; McCormick v. Talcott, 20 How. 405; Wells v. Gill, 1 Ban. & A. 77; Kendrick v. Emmons, 2 Ban. & A. 208; Turrell v. Spaeth, 3 Ban. & A. 458; Colt v. Arms Co., 1 Fish. P. C. 108; Winans v. Railroad, 4 Fish. P. C. 2; Whipple v. Mfg. Co., 4 Fish P. C. 29; Fruit Co. v. Curran, 8 Fed. 150.

With respect to such a patent (a pioneer) the well-settled rule is that the patentee who has, by the success of his patent, pointed out the combination of functions needed to reach the new result, and has claimed the combination of mechanical parts performing those functions, may enjoin the use of another machine producing the same result where the second machine differs from the first only in a substitution, for parts or elements in the patented device, of parts or elements which though different in form and kind, perform the same functions in substantially the same way. It may be that the substituted parts are well known equivalents of those shown in the patent for the performance of the functions



to which they are respectively applied, in which case there is manifestly no inventive faculty shown in the change; or it may be that, being shown by the successful operation of the patent the exact nature of the functions to be performed by a part of the patented device, the infringer by the use of his inventive faculty, hits upon something as a substitute which will perform the same functions more completely and satisfactorily. In the latter case he is a tributary inventor; but he is none the less an infringer if he uses the whole machine, with his substituted parts to accomplish the same new result. The rule as to infringement of pioneer inventions which point the way to new products or results is analogous to that applied in cases of infringements of process patents in which the discoverer is only required to point out one practical method of using his process, and is permitted to claim tribute from all who thereafter use the process, whether with his apparatus or with a different or improved means. In *Machine Co. v. Lancaster*, 129 U. S. 263, the Supreme Court said:

‘Where an invention is of a primary character and the mechanical functions performed by the machine as a whole are entirely new, all subsequent machines which employ substantially the same means to accomplish the same result are infringements, although the subsequent machine may contain improvements in the separate mechanisms which go to make up the machine.—*McCormick v. Aultman*, 69 Fed. 371; 16 C. C. A. 259.’

*Consolidated v. Crosby*, 113 U. S. 157; *Royer v. Belting Co.*, 135 U. S. 319; *Machine Co. v. Murphy*, 97 U. S. 120; *Sessions v. Romadka*, 145 U. S. 29; *Clough v. Barker*, 106 U. S. 160; *Winans v. Denmead*, 15 How. 330; *McCormick v. Talcott*, 20 How. 402; *Railway v. Sayles*, 97 U. S. 554.

All subsequent machines which employ substantially the same means to accomplish the same results are infringements, notwithstanding the subsequent machine may contain improvements in separate mechanisms which go to make up the machine.—*Von Schmidt v. Bowers*, 80 Fed. 121; 25 C. C. A. 323; *McCormick v. Talcott*, 20 How. 402; *Railway v. Sayles*, 97 U. S. 554; *Clough v. Barker*, 106 U. S. 166; *Consolidated v. Crosby*, 113 U. S. 517.”

We quote also from *Walker on Patents*, 4th edition, as follows (pp. 315 to 317):

“There are two tests of equivalency. 1. Identity of function. 2. Substantial identity of way of performing that function. Primary as well as secondary patents are infringed by no substitutions that do not fully respond to the first of these tests. The second of these tests is somewhat elastic, because it contains the word ‘substantial.’ That word is allowed to condone more and more important differences in the case of a primary patent, than in the case of a secondary one. In the case of a patent narrowed in construction by an extensive state of the preceding art, the word ‘substantial’ will give but little elasticity to the application of the doctrine. If fewer inventions preceded the one at bar, the word will have somewhat more of carrying power. When the invention at bar is strictly primary, and especially if it is extremely useful, then the word ‘substantial’ will be made to cover differences alike numerous and important, and even highly creditable to the infringer who invented them.

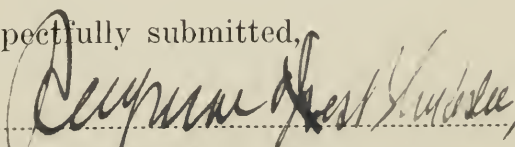
Sec. 363. A change of form does not avoid an infringement of a patent; unless the form shown in the patent is necessary to the functions which the patent ascribes to the invention; or unless that form is the distinguishing characteristic of

the invention or is essential to its patentability; or unless the patentee specifies a particular form as the means by which the effect of the invention is produced, or otherwise confines himself to a particular form of what he describes. Even where a change of form somewhat modifies the construction, the action or the utility of a patented thing, non-infringement will seldom result from such a change." (Cases being cited by the author.)

The ruling announced by the Supreme Court in Adamson v. Gilliland, <sup>243 U.S.</sup> does not apply in the case at bar. In other words, all of the testimony being taken out of Court in deposition form, the whole case, completely, as to both facts and law, comes before your Honors for complete consideration de novo.

The patent stands as a legally granted monopoly, and this legal grant, in its full effect and with its full covenants, should be established and confirmed on behalf of its present owner. The patent is obviously unanticipated and clearly infringed, and reversal of the decree of the lower Court, we submit, is proper with all consideration of law and precedent, equity and good conscience, and it is respectfully solicited that such reversal of the decree be ordered with direction that the relief prayed for in the appellant's bill of complaint be ordered granted, with costs to appellant.

Respectfully submitted,

  
Solicitor and Counsel for Complainant-  
Appellant.

